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Hugh S. Hanna, Editor

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This Issue in Brief

River towboats on the Ohio-Mississippi River system offer employment to several thousand persons, with wages ranging as high as $450 per month for pilots down to an average of $76.58 for deckhands, firemen, and other unlicensed personnel. In addition to these cash wages, all members of a crew receive meals and lodging aboard the boat, even when it is tied up in port. It is a 7-day industry and the majority of the employees covered by the Bureau's survey had a workweek of 84 hours. Page 1083.

Less than 9 percent of professional engineers have a written contract of employment, according to reports from more than 35,000 engineers covered in the survey of that profession by the Bureau of Labor Statistics. About one-third of those reporting had pension privileges of some kind, the largest number of them being in the employment of the Federal Government. Page 1110.

The wide extent of the practice of withholding wages when due, and the inadequacy of legal machinery for the collection of wage claims, are again emphasized by the results of an inquiry just completed by the Bureau of Labor Statistics. Encouraging features, however, are the record of excellent work done by State labor offices operating under progressive wage-collection laws, and even by some labor offices without power to enforce settlements; and the fact that legislation on behalf of workers with small wage claims is now being considered in a number of States. Page 1102.

Occupational diseases, including silicosis, have been under the Workmen's Compensation Act in Wisconsin since 1919. As a result, Wisconsin is the only State with a long and continuous experience of compensating silicotic disability. During the 17-year period surveyed in a study of Wisconsin's experience, many important questions have been answered by the courts, necessitating amendments to the compensation act. Preliminary statistical data show a heavy concentration of claims during 1933 and 1934, due partly to unemployment and partly to the fact that as a result of subjecting employees to medical examinations many of those with symptoms of silicosis were discharged, although most of them were not disabled. Page 1089.

Average earnings of Negro workers in independent tobacco stemmeries were only 16 cents per hour in September 1935, according to a survey of that industry made by the Bureau of Labor Statistics. With an average of 43.4 hours of employment per week, weekly earnings were

only $6.92. Independent stemmeries were never subject to a code under the N. R. A. Page 1153.

The union wage rate for truck drivers averaged 72.7 cents per hour in 1936. The average hours per week provided in the union scales were 48.1, with a few locals having a working week of less than 35 hours and a few working more than 60 hours. The check-off of union dues is provided for in about one-fourth of the agreements. Page 1245.

For every 1,000 board feet of planing-mill lumber delivered at the construction site, 32.7 man-hours of employment were required in production and transportation processes. Other types of lumber created different amounts of employment, the more finished products requiring more labor. Thus, in the case of hardwood flooring, each 1,000 flooring feet of product created 83.0 man-hours of employment in fabrication at the mill and in transportation to the place where it was to be used. Page 1136.

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Wages, Hours, and Working Conditions on River Towboats[1]

INLAND river shipping has withstood, with occasional aid from Federal and State Governments, more than a century of competition from the railroads, and is still thriving in the face of a newer form of competition from motortrucks. No accurate figures are available as to the number of people who earn a livelihood on inland waterways, but a recent estimate gave the total employment as 15,000 for the year 1934, 7,400 of whom were vessel workers.[2] The importance of this industry may be further seen from the fact that in that year it carried a total of 194,786,000 short tons of domestic freight.[3]

The present article is confined to the Ohio-Mississippi river system and its tributaries, which is the most important of all navigable inland waterways in the country. It is also limited to towboats, thus excluding the relatively less important passenger and packet boats as well as barges. The information collected covers a pay-roll period during the month of August 1935.

The data in the article are based on a representative sample of 15 companies which operated 34 towboats with a total of 756 vessel employees. These companies consisted of 7 industrial carriers (with 13 towboats and 254 employees), 5 contract carriers (with 10 towboats and 242 employees), and 3 common carriers (with 11 towboats and 260 employees). The companies carried on operations out of Pittsburgh, Cincinnati, St. Louis, Memphis, and New Orleans. The river towboats varied in size from 85 to 1,145 gross tons, most of them being propelled by steam power, with a few operated by Diesel engines.

Personnel

IN SPITE of their small size, the river towboats require a varied crew. The crew may be divided in two parts, the licensed and the unlicensed personnel.

[1] Prepared by Orrin R. Mann, of the Bureau's Division of Wages, Hours, and Working Conditions.
[2] The remaining employees consisted of 7,600 executives and shore workers. (See report of Federal Coordinator of Transportation: Wages, Hours, and Working Conditions in Domestic Water Transportation (Washington, 1936), vol. I, p. 13.)
[3] Idem, p. 5.

The licensed personnel consists of masters, mates, and pilots in the deck department and chief engineers and their assistants in the engine department. Before engaging in service, these men must obtain licenses issued by the Bureau of Marine Inspection and Navigation of the United States Department of Commerce. Some of the larger boats also have radio operators, who are licensed by the Federal Communications Commission.

The unlicensed personnel is made up principally of the following: Miscellaneous petty officers; deck hands; firemen and coal passers; oilers, wipers, and water tenders; stewards and crew cooks; and messmen and cabin boys. The stewards and their assistants found in the present study were all female workers, some being the wives of other crew members. Of the 519 unlicensed employees, the coverage included 58 (11 percent) Negroes, who were employed largely as firemen and coal passers, cooks and messboys, and deck hands.

Employment Policies

THE hiring policies of the several companies varied considerably. In 7 out of 15 firms (4 industrial and 3 contract carriers), a company official was responsible for the hiring of the entire personnel. In 2 others (1 industrial and 1 common carrier) a company official hired all of the licensed personnel, and in the remaining 6 (2 industrial, 2 contract, and 2 common carriers), he was responsible only for the employment of the master and chief engineer; in all of these 8 companies mentioned, however, the master hired the rest of the deck and steward personnel and the chief engineer hired the necessary employees for the engine department. In practically all cases, employment was obtained by direct application either to company offices or to the boat. The majority of employees were hired by the day or month, as in towboat service, unlike foreign service, it is not required by law to "sign on" before each trip.

All companies reported that they preferred their employees to be American citizens, and 3 of them (2 industrial and 1 common carrier) insisted that their employees be American born. Only 1 contract carrier required its workers to undergo a physical examination upon entering the service. Very few firms reported having an age limit above which one could not obtain employment; and 3 industrial, 3 contract, and 2 common carriers reported no minimum age requirements. One industrial and 1 contract carrier reported a minimum hiring age of 18; 2 industrial, 1 contract, and 1 common carrier had a minimum of 21; and 1 industrial carrier reported a minimum ranging from 18 to 25, depending upon the position requested by the applicant.

A married man or a single man with dependents stood a better chance of employment with 3 industrial, 2 contract, and 1 common carrier than did a single man without dependents, according to the

reports of the companies. On the other hand, the remaining firms, (4 industrial, 3 contract, and 2 common carriers) declared that marital status or number of dependents was not taken into consideration in hiring.

Seniority was of primary consideration in lay-offs and promotions, as stated by 4 industrial, 2 contract, and 3 common carriers; while 2 industrial and 2 contract carriers considered seniority only after ability. One industrial and 1 contract carrier reported no policy as to seniority.

The firing and lay-off of employees was usually done by the person responsible for hiring them originally. In case of lay-off due to illness or injury away from the home port, practically all companies reported that the worker received free hospitalization (furnished by marine hospitals under the U. S. Public Health Service), pay for time lost, and free transportation to the home port. Two industrial and 1 each of the contract and common carriers had workmen's compensation, in order to take care of the employees injured in the line of duty. As to workers discharged with prejudice away from the home port, 7 companies (2 industrial, 3 contract, and 2 common carriers) reported "no policy", 2 industrial carriers declared that they would pay them to the end of the pay period, and 6 companies (3 industrial, 2 contract, and 1 common carrier) stated that the employee would be "paid off" and furnished free transportation to the home port.

Basic Monthly Wage Rates

IN NEARLY all instances, the employees on river towboats, both licensed and unlicensed, were paid a basic monthly rate. A few of the pilots were hired on a daily basis, but for purposes of comparison their earnings were converted to a monthly basis.

As regards the licensed personnel, the range in monthly rates for all carriers was from $85 to $450, with an average of $220.03 for all employees. Contract carriers averaged somewhat more than industrial carriers, while the common carriers had the lowest average. Although the order varied considerably from one occupation to another, the industrial carriers showed the highest average in most of the occupations (see accompanying table).

Masters and pilots were the highest-paid occupations in all cases, with the average of the former exceeding that of the latter for all except contract carriers. Chief engineers ranked third in every instance, being closely followed by assistant engineers. Next in order were the first mates, while the junior engineers were the lowest-paid employees. Radio operators were reported only by common carriers, and their average was somewhat higher than that of mates.

Monthly Basic Rates of Employees on River Towboats by Occupation, August 1935

Occupation	All carriers				Industrial carriers			
	Number of employees	Monthly rate			Number of employees	Monthly rate		
		Average	Minimum	Maximum		Average	Minimum	Maximum
Licensed personnel	233	$220.03	$85.00	$450.00	87	$228.28	$90.00	$339.00
Masters	33	299.58	150.00	350.00	16	291.81	180.00	339.00
Mates, first	29	139.34	90.00	165.00	12	152.50	90.00	165.00
Pilots	61	283.13	125.00	450.00	21	266.38	200.00	300.00
Engineers, chief	36	223.28	100.00	271.00	14	242.79	150.00	271.00
Engineers, first and second	39	213.55	125.00	252.00	15	222.80	155.00	252.00
Engineers, junior	26	100.33	85.00	140.00	9	114.00	114.00	114.00
Radio operators	9	121.67	105.00	150.00	------	------	------	------
Unlicensed personnel	519	76.58	30.00	141.00	167	96.21	30.00	141.00
Deck hands	224	72.87	37.50	114.00	65	95.44	45.00	114.00
Firemen and coal passers	116	89.70	45.00	114.00	52	101.45	67.50	114.00
Oilers, wipers, and water tenders	21	63.43	63.00	67.50	2	(1)	(1)	(1)
Stewardesses and assistants	40	61.60	36.00	90.00	18	67.67	36.00	90.00
Chefs and crew cooks	30	99.02	37.50	141.00	11	109.95	37.50	141.00
Other cooks	12	71.50	57.75	99.00	------	------	------	------
Messmen and cabin boys	20	34.13	30.00	60.00	3	(1)	(1)	(1)
Miscellaneous petty officers, deck	34	108.10	60.00	140.00	13	127.54	100.00	140.00
Miscellaneous other employees	22	59.22	31.50	120.00	3	(1)	(1)	(1)

Occupation	Contract carriers				Common carriers			
	Number of employees	Monthly rate			Number of employees	Monthly rate		
		Average	Minimum	Maximum		Average	Minimum	Maximum
Licensed personnel	68	$232.29	$85.00	$450.00	78	$200.15	$89.25	$350.00
Masters	9	289.11	150.00	350.00	8	326.88	300.00	350.00
Mates, first	8	145.13	120.00	165.00	9	116.67	110.00	120.00
Pilots	23	299.00	125.00	450.00	17	282.35	150.00	350.00
Engineers, chief	11	211.73	100.00	271.00	11	210.00	100.00	270.00
Engineers, first and second	11	207.00	125.00	252.00	13	208.42	185.00	220.00
Engineers, junior	6	91.67	85.00	95.00	11	93.86	89.25	140.00
Radio operators	------	------	------	------	9	121.67	105.00	150.00
Unlicensed personnel	170	82.08	30.00	141.00	182	53.42	31.50	99.00
Deck hands	75	80.16	45.00	114.00	84	45.67	37.50	47.50
Firemen and coal passers	46	87.07	50.00	114.00	18	62.50	45.00	90.00
Oilers, wipers, and water tenders	------	------	------	------	19	63.00	63.00	63.00
Stewardesses and assistants	22	56.64	45.00	77.00	------	------	------	------
Chefs and crew cooks	11	104.64	45.00	141.00	8	76.25	37.50	99.00
Other cooks	------	------	------	------	12	71.50	57.75	99.00
Messmen and cabin boys	2	(1)	(1)	(1)	15	31.50	31.50	31.50
Miscellaneous petty officers, deck	14	103.57	75.00	140.00	7	81.07	60.00	89.50
Miscellaneous other employees	------	------	------	------	19	55.54	31.50	63.00

[1] Not enough employees to justify the computation of an average.

An examination of the data indicates that the pay of the master did not depend upon the size of the boat. In a number of instances, however, the pay of the chief engineer varied directly with the power tonnage of the boat.

Employees in the unlicensed personnel averaged $76.58 for all carriers, with the individual rates varying from $30 to $141. The average for industrial carriers exceeded somewhat that of contract

carriers, but the common carriers averaged considerably less than the latter. This order appeared in every occupation for which data were shown for all three types of carriers.

Miscellaneous petty officers on deck and chefs and crew cooks were the highest paid among the unlicensed workers, the average for the former exceeding that of the latter for industrial and common carriers, but not for contract carriers. Taking the remaining occupations where data appear for all types of carriers, the averages of firemen and coal passers ranked next in order, followed by deck hands, these two occupations comprising the majority of the unlicensed personnel. Stewardesses and their assistants, who are the only females reported in this survey, were employed only by the industrial and contract carriers, their averages being the lowest shown for those carriers. Among the occupations for which averages appear only for common carriers, "other cooks" earned somewhat less than chefs and crew cooks, and oilers, wipers and water tenders received slightly more than firemen and coal passers, with by far the lowest earnings being reported for messmen and cabin boys.

An examination of the figures reveals that none of the companies employed whites and Negroes together on a boat in the same occupation. Taking all carriers, a comparison of the data shows that 24 colored firemen and coal passers averaged $89.19, as compared with $89.84 for 92 whites, that 14 Negro messmen and cabin boys averaged $33.32, as against $36.00 for 6 whites, and that 9 colored deck hands averaged $53.61, as compared with $72.39 for 215 whites.

Subsistence and Lodging

In addition to the monthly rates, both the licensed and unlicensed personnel received subsistence consisting of meals and lodging aboard the boat, as long as the vessel was in active service. No cash allowance was given to any of the personnel in lieu of subsistence, because all of the force had the privilege of eating and sleeping aboard even when the boat was tied up in either home or other port. When the boat was taken out of active service, the crew were either transferred to other boats or were laid off. The data obtained as to the value of this subsistence are very rough estimates, the figures varying from $24 to $60 per month.

From the meager reports on hand, it appears that the food served on the boats was fairly good, but the sleeping accommodations only passable. As to room space, on the majority of vessels the master and chief engineer each had private rooms or cabins, and the rest of the licensed and unlicensed personnel were assigned two to a room. In a few instances, however, the unlicensed personnel slept in "bunk rooms" containing from two to eight "bunks."

Working Time

THE working time of the personnel, both licensed and unlicensed, aboard river towboats was long. Eleven of the 15 companies reported the employees as working "6-hour watches", i. e., as being on duty 6 hours and off duty 6 hours, making a total of 12 working hours out of 24 hours per day. One common carrier and one contract carrier had a 10-hour day in the stewards' department (waiters, laundresses, cooks, cabin boys, etc.). Two industrial carriers and one common carrier had a 10-hour day and one contract carrier a 9-hour day for the entire personnel, but in all of these cases the boats made only short trips. Of course this is a 7-day industry, so that the majority of the personnel had a workweek of 84 hours.

Overtime is not a problem on river towboats. The companies that divided the work into 6-hour watches carried two crews, while those having a workday of less than 12 hours were, as stated above, operated on the basis of short trips with overtime work as the exception.

Of the 15 companies, only 5 had any policy as to holiday work. One attempted to have the boats in port on Christmas and New Year's Day; a second attempted to have the boats in port on Christmas Day and the Fourth of July and observed any other holiday when the boats were in port; a third did only such work as was necessary during holidays while en route but observed all holidays while in port; the fourth attempted to have the boats in port on holidays, but only those crew members remaining aboard received pay; and the last observed any holiday on which the boat was in port, giving the crew time off with pay.

Vacation policies were reported by 7 of the 15 companies included. Of these 7, all provided vacations to the licensed personnel. This took the form, in most instances, of paid vacations after 1 year's service, ranging from 7 to 15 days. As to the unlicensed personnel, 1 company granted 15 days of paid vacation to all employees but failed to state the length of service necessary for eligibility, while another granted 7 days' vacation to stewards and watchmen only after 1 year of service.

Experience With Silicosis Under Wisconsin Workmen's Compensation Act, 1920 to 1936

By MAX D. KOSSORIS, BUREAU OF LABOR STATISTICS, and O. A. FRIED, CHIEF STATISTICIAN, INDUSTRIAL COMMISSION OF WISCONSIN [1]

WISCONSIN was one of the first States to legislate in the field of workmen's compensation, its law becoming effective in 1911. In keeping with the philosophy of the time, the law applied to accidental injuries and proceeded on the theory that compensation for such injuries should be considered as part of the cost of production.

In 1919 the law was amended to include as compensable injuries occupational diseases growing out of and incidental to the employment. The determination of what were occupational diseases was left to the industrial commission. The power of the commission to make such determinations as findings of fact, and apply to them the existing law, was upheld as constitutional by the Supreme Court of Wisconsin in 1924.[2]

The second occupational-disease case to reach the State supreme court involved silicosis with superimposed tuberculosis. The court held that in the stonecutting industry, the filling of the lungs with granite dust made employees of this industry "much more, and particularly, susceptible to pulmonary tuberculosis", thus recognizing tuberculosis developed under such circumstances as within the occupational-disease provisions of the workmen's compensation law.[3]

The Schaefer case in 1924 raised a point peculiar to many occupational diseases, and particularly to silicosis—that of lengthy exposure. Generally, in an accidental injury the damage to a worker is inflicted quickly. He falls and breaks an arm. An explosion occurs and he is killed. But silicosis, making the lungs particularly susceptible to pulmonary infections—usually tuberculosis or pneumonia—develops over an extended period of time. The current medical opinion is that the time necessary to develop silicosis depends on several factors: (1) The amount of free silica dust of harmful size in the air breathed by the worker, (2) the rhythm of work on which depends the depth of breathing, (3) the length of exposure, and (4) the individual's own power of resistance. While the length of exposure

[1] For the data dealing with the discussion of the legal phase of Wisconsin's silicosis experience, the Bureau of Labor Statistics is indebted to C. J. Otjen, attorney, of Milwaukee, Wis.

[2] *Schaefer & Co.* v. *Industrial Commission* (1924). 185 Wis. 317, 201 N. W. 396.

[3] *Wenrich* v. *Industrial Commission* (1924), 182 Wis. 379, 196 N. W. 824.

varies for different industries, and within these industries for various occupations, the exposure period necessary to develop a disabling stage of silicosis usually runs into years. During this period, a worker may be exposed to harmful silica dust while working successively for two or more employers. If all of them contributed to the ultimate disability resulting from silicosis, which one should be held liable for the benefits to be paid under the workmen's compensation act?

In the Schaefer case, the industrial commission had before it the situation of a worker who was suffering from tuberculosis superimposed upon silicosis. The disabled worker, a tool sharpener, was employed concurrently by three separate concerns, each of which exposed him to dangerous silica dust. He had been employed before then by two other employers in the same industry. The commission decided that the compensation due the injured employee should be prorated among the three concerns employing the injured at the time the disability became effective, but denied the contention of these employers that the two earlier employers should be also held liable. The Supreme Court of Wisconsin affirmed the award of the industrial commission, and in connection with this particular point held that "liability attached as of the date of disability", as in the case of traumatic injuries. On the basis of this rule, the industrial commission continued to hold that liability for compensation attached to that employer in whose employment the disabled worker was at the date of disability, even though employment was as short as 3 months in one case and 2 months in another.

The question came up for decision again in 1928, in a case which arose because of a change of insurance carriers during the period of exposure of a worker who had been awarded compensation. The second insurer maintained it was not liable because the time it had carried the risk was too short to have permitted the causation or aggravation of the case of silicosis in question. The supreme court, however, held to its rule and decided that the relative length of exposure was not important, and that inasmuch as the second insurer covered the risk at the date the disability developed, it was liable. The court maintained that any other rule would make it very difficult to administer the occupational-disease provision of the workmen's compensation act. If liability were to be determined as of the date of the inception of disease, the worker would be under the necessity of giving notice of every slight ailment which might be due to incipient stages of occupational diseases and which, sooner or later, might cause disability.[4] As for the hardship on the insurance carrier who was caught in such a risk, the court thought that in the long run no harm would be done because the law of averages would equalize such burdens among employers and insurance carriers.

[4] *Employers Mutual Liability Insurance Co.* v. *McCormick* (1928), 195 Wis. 410, 217 N. W. 738.

New questions arose, however: If a worker had contracted silicosis while working for one employer, but did not become disabled until after he had entered the employ of a second employer who in no way had contributed to the development or aggravation of silicosis, was the second employer liable just because the date of disability occurred during employment with him? The court answered in the negative, insisting that there must be a causal relationship between the disease and the work of the employee.[5]

But if the second employer was not liable for compensation, could the disabled worker have recourse against the first employer, even though no longer employed by him? The supreme court dealt with this issue in 1933[6] in a case involving not silicosis but another occupational disease, dermatitis. The worker in this case, although experiencing discomfort, kept on working. He did not become disabled until after the employer-employee relationship had terminated. Although there was apparently little question of the existence and cause of the disability, the court held that the former employer was not liable because the employer-employee relationship did not exist on the date when the disability began. In this type of situation, then, the disabled worker had no recourse against anybody.

This decision came during a period when the industrial commission had before it a great many claims for disability resulting from silicosis. Workers who had been exposed to silica dust but were now unemployed or employed only part time, filed claims in the hope of obtaining some income in lieu of wages. Perhaps even more important were the claims filed by workers who had been discharged or refused employment because physical examinations—not always competent—had indicated some silicotic condition. Current public concern with silicosis and relatively large compensation awards had caused employers and insurance carriers to center their attention on silicosis. A considerable number of insurance carriers refused to write or renew policies unless employers subjected their workers to physical examinations and discharged all those with any symptoms indicative of silicosis. Such workers, although not disabled at the time, might later become claimants for compensation. Employment was refused to applicants if they could not pass medical examinations for silicosis. Some self-insurers followed the same practice. As a result, many workers who had been discharged or refused new employments, on the ground that they had silicosis, filed claims.

In 1935, the supreme court had occasion to study this problem and came to the conclusion that an employer could discharge his workers for any silicotic condition, even though developed in his employment.[7] This ruling meant that an employer could have his

[5] *Hayes* v. *Industrial Commission* (1930), 202 Wis. 218, 231 N. W. 574.
[6] *Kimlark Rug Corp.* v. *Industrial Commission* (1933), 210 Wis. 319, 246 N. W. 424.
[7] *Motor Castings Co.* v. *Industrial Commission* (1935), 219 Wis. 204, 262 N. W. 577.

employees examined, discharge them for any silicosis discovered, and be free from any liability thereafter, unless a worker could prove actual disability due to silicosis while still in his employment. If the disability occurred while the worker was unemployed, or while he was employed by another company at an occupation free of any silicotic hazard, the worker had lost his right to compensation.

The harshness of these rules led to attempts on the part of claimants to find ways out of the dilemma. Obviously, meritorious claims were being barred. The right of recovery was perceived to hinge on the meaning of "disability." Ingenious attempts were made to distinguish between physical disability and medical disability. "Physical disability" was interpreted to mean actual physical inability to carry on. "Medical disability" was defined as a physical condition such that a medical adviser would have recommended stoppage of work although the employee continued at work. The industrial commission allowed compensation on this theory, interpreting "disability" to mean "medical disability." The court put an end to this procedure, however, by refusing to recognize "medical disability" in the absence of an actual wage loss in the regular course of employment.[8]

Part-time employment, staggered employment, and temporary layoffs, however, facilitated recovery in compensation for silicotic disability, even though workers could not prove disability while actually working. It was a relatively simple matter to date medical testimony back to a period of temporary idleness of the employee, so as to prove that the disability did occur while the employer-employee relationship existed. Such testimony was hard to disprove. Backed up by medical opinion, the additional point was made that the employee was able to continue at work only because it was staggered, and that he could not have continued under steady work. The court met these contentions by interpreting "disability" to mean wage loss when work was avilable.[9]

To provide for cases in which disability arose subsequent to discharge, the Workmen's Compensation Act was amended in 1933 defining, for occupational diseases, the date of injury as "the last day of work for the last employer whose employment caused disability" (sec. 102.01 (2)). The court, however, held that even under this amendment, wage loss had to be shown, and that in the absence of wage loss, there was no disability and consequently no recovery in compensation. Before an employee was entitled to compensation, therefore, it was not sufficient to prove medical disability. It was also necessary to prove wage loss, and not simply potential wage loss.[10]

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[8] *Schaefer & Co.* v. *Industrial Commission* (1936), 220 Wis. 289, 265 N. W. 390; and *North End Foundry Co. cases* (1935), 217 Wis. 363, 258 N. W. 439.

[9] See *Kimlark Rug Corp. case* and *North End Foundry Co. cases* already cited. There were a number of other cases to the same effect.

[10] See *Schaefer case* cited above.

Summarizing, the effects of the legislative enactments applied by the commission, as approved, modified, or reversed by the Supreme Court of Wisconsin, are as follows:

1. Prior to the amendment in 1935, to have a valid claim, a worker had to prove that his disability occurred while the employer-employee relationship existed.

2. Subsequent to the amendment in 1935, making the date of liability "the last day of work for the last employer whose employment caused disability", an employee who became disabled subsequent to discharge had a valid claim against the last employer whose employment was a contributing factor to his silicosis.

3. Disability prior and subsequent to the 1935 amendment must be demonstrable in wage loss, and not simply potential wage loss or medical disability.

4. The employer in whose employment a worker is at the time of his disability, or the last employer whose employment was a contributing factor in his disability, must bear the full cost of compensation even though that period of employment was not sufficiently long to cause the condition, it being sufficient if it contributed thereto.

As a result of these rules, the 1935 legislature enacted the following amendments to the compensation law:

1. A final award dismissing a claim because the disease had not as yet caused disability was not to be a bar to a claim for disability developed subsequently. (Sec. 102.18.)

2. In cases of discharge from employment because of nondisabling silicosis, thus occasioning wage loss, the commission may allow compensation not to exceed 70 percent of the employee's average annual earning; but a payment of such a benefit was to bar any subsequent recovery from silicotic disability. (Sec. 102.505.)

The purposes of these amendments obviously were (1) to safeguard the right of an employee to be entitled to compensation when actually disabled, even though an earlier claim had been dismissed because no disability could be proved at the earlier date, and (2) to provide for a method of rehabilitating workers barred from following their regular occupations because they had contracted silicosis, even though not disabled. They represent an attempt to couple wage loss with the termination of employment, and thus to meet the standard prescribed by the supreme court.

Neither of these two amendments has as yet run the gauntlet of judicial opinion.

Incidence of Silicosis [11]

DURING the 17-year period from 1920 to 1936, inclusive, 799 claims [12] for disability resulting from silicosis were filed and passed upon by the Industrial Commission of Wisconsin. The 10 cases shown as settled by the commission in 1936, in the preliminary survey, fall short of the

[11] The statistical data upon which this discussion is based were obtained from a preliminary tabulation of a comprehensive survey of Wisconsin's silicosis experience now being carried on by the statistical division of the Industrial Commission of Wisconsin.

[12] A subsequent recheck has raised this figure to 893.

number of cases actually filed or settled during that year, estimated to be between 40 and 50. In 469 of the 799 cases compensation was paid, although sometimes in small amounts as compromises in what may be called nuisance cases fostered by ambulance-chasing attorneys. In 330 the claims were disallowed or, in some instances, withdrawn by the claimants themselves. Fully 55 percent of all compensated claims and 62 percent of those rejected were filed in the 2 years 1933 and 1934.

Distribution of Cases, by Industry

The distribution of compensated claims for silicotic disability is shown in table 1 for eight general industry groups. The largest number of cases for any one group is in the machinery industries, with foundries second and stonecutting and quarrying ranking third. This distribution is not particularly significant, however, for the number of cases is obviously dependent upon the number of workers exposed to the danger of developing silicosis. But due to the fact that silicosis is a disease developed over a period of years, it is practically meaningless to compute any exposure rates on the basis of the number of workers exposed at any one time.

It will be noted that about one-third of all cases resulted in death. The highest ratios of fatal to nonfatal cases occurred in the miscellaneous manufacturing and stone industries other than cutting and quarrying—both small in total number of cases. Out of 46 cases in the enameled-ware industry, 27 resulted fatally. In stonecutting and quarrying, 47 out of 99 cases resulted in death. In iron mining exactly one-third of all compensated cases were fatal. These data, however, are not indicative of the relative hazards in the industries covered. The compromised and nuisance cases appeared more largely in some industries than in others. The employment status of possible claimants, together with the activity of lawyers who interested themselves in developing claims, should be kept in mind in reading the ratios of fatal to nonfatal cases.

Table 1.—Compensated Silicosis Cases in Wisconsin, Classified by Industry, 1920 to 1936

Industry	Number of cases		
	Fatal	Nonfatal	Total
All industries	159	310	469
Mining	14	28	42
Stonecutting and quarrying	47	52	99
Allied stone industries	9	6	15
Enameled-ware industry	27	19	46
Foundries	14	87	101
Other metal industries	8	28	36
Machinery industry (including transportation equipment)	36	89	125
Miscellaneous manufacturing industries	4	1	5

Distribution of Cases, by Occupation

The 469 compensated cases have been classified by occupation in table 2. Molders headed the list with a total of 86 cases, 10 of which were fatal. Stonecutters followed with 69 cases, and of these, 29, or 42 percent, were fatalities. Sand blasters and sand-blast-machine operators in foundries accounted for 57 cases, but 52 percent of these were deaths. The death rate of 58 percent for sand blasters, including two cases in the stone industries, was higher than that of any other occupation.

More than half of both fatal and nonfatal cases in the enameled-ware industry occurred to sand blasters, with three fatalities for molders. Most of the molder cases were in the foundry group. Also high in the foundry group was the laborer classification with 17 cases, 3 of them fatal, and unclassified occupations with 18 cases, of which 5 were fatal. In other metal industries, molders again accounted for 19 out of 36 cases. As in the case of foundries, the proportion of fatalities for this occupation was low, with only 1 out of 19 cases. Sand blasters, on the other hand, had three fatalities out of a total of five cases.[13]

In the machinery group, molders and chippers accounted for 25 and 24 cases, respectively, out of a total of 125 cases of silicosis for all occupations. Four out of the 25 molder cases were fatalities, as were 8 out of 24 for chippers. Sand blasters accounted for 18 cases, but of these, 13 were fatal.[13]

Table 2.—Compensated Silicosis Cases in Wisconsin, Classified by Occupation,[1] 1920 to 1936

Occupation	Number of cases		
	Fatal	Nonfatal	Total
All occupations	159	310	469
Blacksmiths		1	1
Carvers, hand (stone)	1		1
Chippers	12	20	32
Core markers, core blowers	2	7	9
Cutters (stone)	29	40	69
Drillers, machine	1		1
Enamelers	2		2
Foremen, superintendents	1	3	4
Grinders, finish		6	6
Grinders, rough (machine shop)	5	5	10
Grinders, snag, rough grinder hands, swing grinders		10	10
Laborers	10	22	32
Letterers and engravers (stone)	2	1	3
Miners	14	28	42
Molders	10	76	86
Polishers, hand (stone)	4		4
Polishers, machine (stone)		3	3
Polishers (metal)	1		1
Sand blasters and sand-blast-machine operators (foundry)	32	25	57
Sand-blast-machine operators (stone)	2		2
Sand dryers	1		1
Sand mixers	1	7	8
Shake-out men		5	5
Stone-crusher operators	2		2
Welders, acetylene cutters	1	5	6
Unclassified	26	46	72

[1] The data to be published later by the Industrial Commission of Wisconsin will also contain an analysis by length of exposure. Errors in the preliminary data made inadvisable the inclusion of such an analysis here.

[13] Because of lack of space, the tabulations upon which these statements are based have been omitted.

Table 2 indicates that it is not necessary to work directly with materials involving free silica in order to contract silicosis. That nothing further than exposure is required is shown by the four cases concerning foremen and superintendents. In the reading of this table, however, the above comment concerning the indication of relative hazard is again in point. The filing of claims was influenced by various factors, among them the employment status of possible claimants, attitude of employers and insurance carriers, and activities of claim adjusters and lawyers.

Employment Status When Filing Claim

The number of cases involving claim for disability from silicosis rose slowly until 1932. In that year 62 claims were filed with the industrial commission, 22 of which were disallowed. In the next year, 167 claims were filed, and in 1934, the peak was reached with 298 cases. More than half of these, incidentally, were disallowed, even when early stages of silicosis were found. No compensation was allowed in such cases because the workers concerned could not prove any disability.

Why this concentration of claims in these 2 years, with the relatively sharp drop from 298 claims in 1934 to 100 claims in 1935? The distribution according to the employment status of the claimants when first filing claim with the industrial commission, as shown in table 3, throws some light on the question.[14]

In 1933 and 1934, 168 out of 465 claimants, or 36 percent of the total for the 2 years, were unemployed due to lack of work. In 73 of these cases, compensation was paid. In 95 cases, the claims were disallowed, indicating that in perhaps one-third of the total cases in these 2 years workers filed claim in the search of some means of income.

Another high concentration of claims was in the group in which employment was terminated or refused because medical examinations indicated some stage of silicosis. There were 124 such claims in 1933 and 1934, more than one-quarter of the total claims filed during these 2 years. In 94 of these cases compensation was paid, and in 30 cases it was disallowed. The practice of discharging employees because a medical examination revealed silicosis, although rarely in a form producing total disability, appears to have been a boomerang, for such employees promptly filed claims for silicosis, and in 76 percent of these cases were able to prove actual disability and to collect compensation.

During these 2 years only 54 claimants were unemployed because of voluntary stoppage of work attributed to silicotic disability. In about half of these cases, compensation was paid. In the other half,

[14] Subsequent check of the preliminary data revealed some changes in the distribution of the data, but not sufficient to disturb the general setting or conclusions.

compensation was disallowed, usually on the ground that whatever disability there was could not be attributed to silicosis.

Table 3.—Employment Status of Workers in Wisconsin at Time of Filing Claim, 1920 to 1936

Year	Claimant employed—			Unemployed because of—				Employment status unknown	Claim filed, after death, by dependents	Total
	With respondent employer	With subsequent employer	On relief work	Lack of work	Medical examination [1]	Disability [2]	Other reasons [3]			
Total silicosis claims, 1920 to 1936	29	5	4	190	186	177	30	142	36	799
Compensated claims	21	2	1	89	130	108	18	75	25	469
1920					1					1
1921										
1922					1	2		1		4
1923						2		3		5
1924					2	4		1	2	9
1925	1					2		3		6
1926	1					2	1	3		7
1927	1				1	3		1		6
1928						7		2	1	10
1929	1				2	9		2	1	15
1930	3				1	11		5		20
1931	3			3	4	10		6	4	30
1932	2			5	5	13	2	8	5	40
1933	4	2	1	32	49	9	4	14	1	116
1934	2			41	45	19	9	22	6	144
1935	3			8	18	12	1	3	4	49
1936 [4]					1	3	1	1	1	7
Noncompensated claims	8	3	3	101	56	69	12	67	11	330
1920										
1921										
1922	1					2		1		4
1923						2				2
1924					1	1				2
1925					1	1		2	1	5
1926		1				2		2		5
1927						1		2	3	6
1928					1	2			1	4
1929					1	2	1	1		5
1930					1	3		1		5
1931					2	7		2		11
1932	2	1			6	7		6		22
1933	2		1	18	10	6	6	8		51
1934	1	1	2	77	20	20	4	28	1	154
1935	1			6	13	12		14	5	51
1936 [4]	1					1	1			3

[1] Discharge; rejection from available employment.
[2] Voluntary stoppage of work charged to disability.
[3] Discharged as inefficient, out on strike, etc.
[4] Data incomplete.

The over-all picture for the 17-year period tells much the same story. Out of a total of 799 claims, only 29 were filed by workers still in the employ of the respondent employer. There were five claimants who were employed with an employer subsequent to the one against whom claim was filed, and four claimants were on relief work. In 36 cases, claims were filed by dependents of deceased workers, and in 11 of these compensation was denied.

Fully 190 cases, or nearly one-quarter of the total claims, were filed by workers unemployed because of lack of work. More than

half of these cases were disallowed. In nearly again as many cases, 186 claims were made by workers who had been discharged or refused employment after medical examinations disclosed silicosis In 70 percent of such cases compensation was paid.

In 177 instances claimants had stopped working because of disability. But nearly a third of their claims were refused compensation because the disability was held not due to silicosis. In 30 cases, unemployment was due to such causes as strikes, discharge for inefficiency, and other miscellaneous reasons. Claimants were given compensation in 18 such instances. In 142 claims, the employment status at the time of filing claim could not be determined from the records of the industrial commission.

Cost of Silicosis Cases

THE amounts of compensation paid in compensated cases during the period of 1920 to 1936 are shown in table 4. Approximately one-third of the 469 cases were fatalities.

For these 469 cases $1,614,648 was paid or awarded.[15] Approximately 40 percent of this was paid in compromised settlements. About 28 percent, $452,138, was paid as compensation for fatalities, and an additional $18,735 for funeral expenses. Slightly in excess of $400,000 was paid for permanent, and about $119,000 for temporary disabilities. The amount paid for medical aid was $26,589, or 1.6 percent of the total paid for silicotic disability.

The number of claims for fatalities increased from 1 in 1920 to a maximum of 27 in 1934. That same year also saw the peak of nonfatal claims for which compensation was paid, 117.

Of particular significance is the heavy concentration of compensated claims in the 2 years 1933 and 1934. During these 2 years alone were filed more than half of the total compensated cases during the 17-year period analyzed. The average amount per case was lowest in 1934, with $2,137, and 1933 followed closely with $2,891. The only other year to show an average as low as these was 1923, during which only five claims were filed. One reason for these low averages in 1933 and 1934 was the large number of compromised settlements. It will be noted that the total amount paid in this manner was higher in each of these 2 years than in any other year.

The highest average cost per case was found not for one of the later years during which the public was "silicosis conscious", but for 1925. For six claims filed during that year, the total average cost per case amounted to $7,291; four of these six cases, however, were fatalities.

The attention paid to the silicosis problem is reflected in the fact that of the allowed claims filed during 1933 and 1934, only 13 and

[15] Recheck of the preliminary data showed a total of $1,856,663 paid for all silicosis cases from 1920 through 1936. The difference is accounted for mainly by the discovery of 94 additional claims.

19 percent, respectively, involved death. In contrast, in the earlier years the percentage of fatal cases to total cases filed was very much higher: 90 percent in 1928, 80 percent in 1929, 85 percent in 1930, 60 percent in 1931, and 60 again in 1932. In 1935, however, the trend of 1933 and 1934 continued, with fatalities only 18 percent of the total.

Table 4.—Compensated Silicosis Cases in Which Payments Were Made in Wisconsin, 1920 to 1936

Year of first information to industrial commission	Number of cases			Payments for—							Average per case
	Fatal	Non-fatal	Total	Death	Permanent disability	Temporary disability	Medical care	Funeral expenses	Compromise [1]	Total [2]	
All cases	159	310	469	$452,138	$408,879	$119,313	$26,589	$18,735	$588,994	$1,614,648	$3,443
1920 [3]	1	------	1	---------	---------	---------	185	200	3,750	4,135	4,135
1922	3	1	4	6,529	---------	5,639	95	200	3,350	15,813	3,953
1923	2	3	5	---------	---------	2,829	1,533	---------	6,650	11,012	2,202
1924	7	2	9	16,366	---------	2,147	511	600	12,441	32,065	3,563
1925	4	2	6	20,992	14,050	3,636	1,765	800	2,500	43,743	7,291
1926	4	3	7	15,711	2,500	12,703	742	600	1,550	33,806	4,829
1927	4	2	6	17,200	20,809	2,723	420	800	500	42,452	7,075
1928	9	1	10	36,205	1,950	4,982	3,120	1,350	6,800	54,407	5,441
1929	12	3	15	65,130	4,742	11,358	2,706	2,200	7,000	93,136	6,209
1930	17	3	20	68,004	---------	14,695	4,073	2,795	15,800	105,367	5,268
1931	18	12	30	71,467	30,681	15,162	4,541	2,550	21,225	145,626	4,854
1932	24	16	40	55,443	46,219	28,670	2,043	2,640	58,440	193,455	4,836
1933	15	101	116	36,288	102,987	10,876	1,177	1,800	182,261	335,389	2,891
1934	27	117	144	32,272	80,063	1,534	1,299	1,400	191,226	307,794	2,137
1935	9	40	49	4,531	78,836	1,869	2,176	400	71,501	159,313	3,251
1936 [4]	3	4	7	6,000	26,042	490	203	400	4,000	37,135	5,305

[1] It was not possible to separate the amounts paid as compromises into payments for various types of disabilities and medical and funeral expenses.
[2] More complete data showed a total of $1,856,663 paid from 1920 through 1936.
[3] No silicosis claims filed in 1921.
[4] Data incomplete.

A comparison is given for the cost of all injury cases and silicosis cases in table 5 for the period from 1920 through 1934. The total paid as indemnity for 285,742 compensated claims was $47,968,891. The total paid for 413 silicosis cases was $1,393,990. The entire cost for all injuries, i. e., all indemnities plus medical aid, was $63,201,928. The cost for silicosis cases was $1,418,200. Whereas the average total cost per nonsilicosis injury was $216.54, the average cost per case of silicosis was $3,433.90—nearly 16 times as high.

Of interest also is the comparison of total silicosis cost with total all injuries cost. In 1920, the cost of silicosis claims filed during the year was 0.16 percent of the total cost for the year. The percentage climbed steadily, reaching 1.06 in 1928, 3.17 in 1931, 4.75 in 1932, 9.40 in 1933, and then declined somewhat to 8.80 in 1934. For the entire 15-year period, silicosis averaged 2.23 percent of the total cost. But until 1931, for 11 years, the percentage remained at less than 2, and for 8 of these years, below 1 percent. Contrasted with these figures, the percentages for the 4-year period from 1931 through 1934

show very large increases. The most significant reasons for these increases no doubt were unemployment and the rather general practice of discharging employees for silicosis indicated by medical examinations.

Table 5.—Comparison of Cost of All Injury Cases and Silicosis Cases in Wisconsin, 1920 to 1934 [1]

Year	Number of cases		Compensation		Cost of medical care		Total cost			Average cost per case	
								Silicosis [1]			
	All injuries	Silicosis	All injuries	Silicosis	All injuries	Silicosis	All injuries	Amount	Percent of total	Non-silicosis [2]	Silicosis
Total	285,742	413	$47,968,891	$1,393,990	$15,233,037	$24,210	$63,201,928	$1,418,200	2.24	$216.54	$3,433.90
1920	16,246	1	1,970,513	3,950	569,571	185	2,540,084	4,135	0.16	156.11	4,135.00
1921	15,898	-----	2,257,255	----------	661,562	-------	2,918,817	----------	-----	183.60	----------
1922	16,705	4	2,410,529	15,718	746,429	95	3,156,958	15,813	.50	188.08	3,953.25
1923	20,941	5	2,794,998	9,479	924,032	1,533	3,719,030	11,012	.30	177.11	2,202.40
1924	22,766	9	3,047,147	31,554	1,153,332	511	4,200,479	32,065	.76	183.17	3,562.78
1925	21,137	6	3,490,021	41,978	1,100,852	1,765	4,590,873	43,743	.95	215.19	7,290.50
1926	22,177	7	3,725,860	33,064	1,122,624	742	4,848,484	33,806	.70	217.17	4,829.43
1927	20,473	6	3,662,406	42,032	1,114,056	420	4,776,462	42,452	.89	231.30	7,075.33
1928	21,818	10	3,885,850	51,287	1,250,216	3,120	5,136,066	54,407	1.06	233.02	5,440.70
1929	22,630	15	4,308,571	90,430	1,433,552	2,706	5,742,123	93,136	1.62	249.79	6,209.07
1930	20,070	20	4,447,141	101,294	1,398,338	4,073	5,845,479	105,367	1.80	286.29	5,268.35
1931	16,943	30	3,486,195	141,085	1,101,978	4,541	4,588,173	145,626	3.17	262.67	4,854.20
1932	16,195	40	3,126,912	191,412	945,953	2,043	4,072,865	193,455	4.75	240.14	4,836.38
1933	14,563	116	2,711,320	334,212	857,992	1,177	3,569,312	335,389	9.40	223.85	2,891.28
1934	17,180	144	2,644,173	306,495	852,550	1,299	3,496,723	307,794	8.80	187.19	2,137.46

[1] Data on all injuries apply to cases settled during the year. Silicosis data apply to settled cases tabulated according to year of filing of claim with industrial commission. The tabulation was made to disclose general trends, but is not to be taken as an accurate measure of annual silicosis cost relative to over-all injury cost, even though percentages to that end are given.

[2] To arrive at the nonsilicosis data, the silicosis data were deducted from the all injuries data.

In connection with such discharges, three interesting instances may be cited, two of which account for much of the compensation paid or awarded during 1933 and 1934.

One of the self-insured iron-mining companies became very much interested in the silicosis problem and had all of its men examined. Where advanced stages of silicosis were found, fairly good-sized settlements were made with the workers. Where silicosis was found in incipient and less advanced stages, minor settlements were made, even though no disability was present. In all, this one company made payments in about 100 cases, in most instances without waiting for claims against it to be filed with the industrial commission.

The second instance, with a different motivation, occurred in the metal-industry group and accounted for about 56 claims. The company was discontinuing operations in the State. It had all of its employees examined, and wherever any silicosis was found, advised the filing of claims against its insurance carrier. This one company is reported to have cost its insurance carrier over $100,000, paid mostly in compromise settlements.

In contrast with the general practice of discharging men wholesale whenever any trace of silicosis was indicated by medical examination—according to reliable reports, a practice often insisted upon by insurance carriers under threat of not renewing coverage—a large, self-insured foundry followed a procedure both more humane and much less costly. All of its employees were examined, and those with silicosis but with no disability were shifted to other occupations devoid of the silicosis hazard. Only one case of advanced silicosis was found, compensation was paid, and the services of the employee terminated. Whereas other concerns in the industry were deluged by claims of silicosis in the wake of their wholesale-discharge policy, this establishment enjoyed peace. And whereas other companies had to hire new workers, this firm kept its experienced men and enjoyed both better efficiency and a better morale among its workers.

Collection of Wage Claims by State Labor Offices

By Mary T. Waggaman, of the Bureau of Labor Statistics

THE inadequacy of the legal machinery for the collection of wage claims is again emphasized in an inquiry just completed by the Bureau of Labor Statistics.[1] The purpose of the inquiry was to ascertain to what extent the various State labor offices assisted workers to collect unpaid wages and to what extent such offices were supported in this work by appropriate legislation. Reports were received from all of the States except one which was known to be doing no work along this line.

The picture presented by the reports is not pleasant. They indicate serious losses to workers through failure of employers to pay wages when due. In those States where the labor offices are fairly well equipped to handle wage complaints, the number of such complaints made runs into hundreds and even into thousands each year. Settlement advantageous to the plaintiffs is effected in a large proportion of the cases. Thus, in California in the fiscal year 1935–36, more than 22,000 complaints of nonpayment of wages were made to the department of industrial relations, and in approximately two-thirds of these cases settlements were made, aggregating more than half a million dollars. Altogether, the 22 labor offices for which more detailed statistics are available reported for 1935–36 the collection of considerably more than a million dollars, the claims settled numbering 35,610 and those submitted, 51,542. The exact relationship between number of claims filed and number of claims settled in favor of the claimant is not available in all cases, as some of the States reported under "settled cases" a certain number of cases which were dismissed or otherwise disposed of.

There is no doubt that great numbers of cases in which wages have remained unpaid are never brought to light. Workers are often ignorant of any means of redress except by employing an attorney, and this way is usually closed to them because of lack of money. Again, the place of employment of the worker may be too remote from a State labor office to permit his filing a complaint. Also, many State labor offices do not have the necessary legal authority, even if otherwise equipped to handle wage claims successfully.

[1] This is the Bureau's fifth inquiry in this field. (See Monthly Labor Review, March 1921, June 1927, October 1930, and October 1933.)

An interesting fact disclosed in the present and preceding surveys is the small size of the average claim. In 1935–36, based on the number of settled claims reported by 22 labor offices, the average was about $30. To the average low-paid wage earners, however, especially to the casual workers who are often involved in wage-claim cases, the sum of $30 may be so significant that its nonpayment means actual tragedy.

The accompanying table shows the claims submitted or handled and settled and the amounts reported collected for the years 1926, 1929, 1932, and 1935–36 in the States whose labor offices sent in reports adapted for tabular presentation. It will be noted that in some States the volume of wage-collection work considerably increased in the decade 1926 to 1936; thus, in New Jersey 350 claims were settled at the earlier date and $10,863 collected, while in the fiscal year 1936 the report is 1,511 claims settled and $62,257 collected. In 1926 in New York 1,005 claims were reported settled and $31,169 collected, as compared with 6,726 claims reported settled and $130,477 collected in 1935–36.

Wage Claims Settled and Amounts Collected, 1926, 1929, 1932, and 1936, Reported by State Labor Offices [1]

State labor office	Number of wage claims [2]							
	1926		1929		1932		1936 [3]	
	Submitted or handled	Settled	Submitted or handled	Settled	Submitted or handled	Settled	Submitted or handled	Settled
Arizona	236	110	642	276	2,450	1,127	449	107
Arkansas	297	146	404	208	322	158	341	[4] 304
California	27,813	16,121	28,419	17,966	35,400	16,517	22,768	13,921
Colorado	961	525	827	471	1,116	541	1,045	535
Connecticut	----------	----------	----------	----------	----------	----------	449	353
Louisiana	----------	----------	----------	----------	----------	----------	1,000	700
Maine	----------	----------	----------	----------	----------	----------	60	15
Massachusetts	1,947	1,947	2,501	1,688	2,405	1,675	2,905	1,651
Michigan	----------	----------	----------	----------	----------	----------	720	694
Minnesota	----------	----------	----------	----------	256	102	236	122
Nevada	201	76	224	192	833	488	338	[5] 139
New Hampshire	----------	----------	----------	----------	----------	----------	41	17
New Jersey	590	350	1,783	1,160	2,805	753	[6] 2,426	1,511
New Mexico	----------	----------	----------	----------	----------	----------	56	39
New York	1,796	1,005	2,860	2,242	9,591	7,332	6,740	6,726
Oregon	1,049	436	1,466	488	1,334	762	2,604	1,416
Puerto Rico	542	222	1,373	842	2,195	1,260	2,314	2,117
Rhode Island	----------	----------	----------	----------	----------	----------	25	21
Texas	73	18	----------	405	1,071	782	3,401	2,277
Utah	245	245	617	286	606	280	----------	----------
Washington	2,122	1,170	3,731	1,410	1,973	974	1,701	1,077
Wisconsin	----------	----------	----------	----------	[7] 2,197	944	1,507	[8] 1,671
Wyoming	----------	174	219	157	(9)	(9)	416	197

See footnotes at end of table.

Wage Claims Settled and Amounts Collected, 1926, 1929, 1932, and 1936, Reported by State Labor Offices—Continued

	Amounts collected							
	1926		1929		1932		1936 [3]	
	Total	Average per claim settled	Total	Average per claim settled	Total	Average per claim settled	Total	Average per claim settled
Arizona	$1,866	$16.96	$14,096	$51.07	$56,516	$50.15	$4,188	$39.14
Arkansas	4,021	27.54	4,829	23.22	3,578	22.65	3,432	11.29
California	[10] 976,368	[10] 60.57	1,051,925	58.55	775,254	46.94	526,856	37.85
Colorado	13,896	26.47	10,821	22.97	12,063	22.30	30,865	57.69
Connecticut							4,018	11.38
Louisiana							8,000	11.43
Maine							225	15.00
Massachusetts	28,705	14.74	54,629	32.36	49,768	[11] 29.71	44,204	26.77
Michigan							18,712	26.96
Minnesota					1,380	13.53	1,532	12.56
Nevada	12,784	168.21	11,746	61.18	26,947	55.22	[10] 13,541	97.42
New Hampshire							377	22.18
New Jersey	10,863	[11] 31.04	24,252	20.91	29,458	[11] 39.12	62,257	41.20
New Mexico							2,027	51.97
New York	31,169	31.01	57,969	25.86	202,638	27.63	130,477	19.40
Oregon	20,147	46.16	16,392	33.59	24,293	31.88	61,868	43.69
Puerto Rico	12,052	22.24	14,459	17.17	16,569	13.15	18,593	8.78
Rhode Island							188	8.99
Texas			32,257	79.65	90,202	115.35	81,293	35.70
Utah	12,377	50.52	13,206	46.17	18,014	64.34		
Washington	73,584	62.89	67,290	47.72	45,244	46.45	39,940	37.09
Wisconsin					35,276	37.37	10,416	6.23
Wyoming	8,594	49.39	5,748	36.61	[9]	[9]	3,364	17.08

[1] The figures in the above table from the earlier surveys of the U. S. Bureau of Labor Statistics were in some cases probably preliminary. The year reported on is sometimes the calendar year and sometimes the fiscal year. In 1929, Arkansas, Maine, and Puerto Rico reported for the fiscal year 1929–30 and Utah for 1927–28. In 1932 the Nevada report covered 18 months and the Nevada figures for 1936 are based on the biennial record.

[2] 1932: The number of claims given for Massachusetts under the caption "submitted or handled" is the number of claims investigated, and under the caption "settled" is the number of claims paid; for New Jersey the number of claims paid is given; for Minnesota the claims submitted or handled and settled are exclusive of claims under the minimum-wage law; and the cases reported settled for New Mexico are "claims paid. 1936 Louisiana figures are approximate ones.

[3] Year ended June 30, 1936. For this year no inquiry was made as to the number of claims handled. The Connecticut figure, under the caption "submitted or handled", however, includes the number of claims carried over. The Utah labor office has been virtually closed since July 1, 1933.

[4] Of 304 claims reported settled, 92 were dismissed as having no merit, 37 cases were reported pending.

[5] Includes cases settled by court action.

[6] 915 cases disallowed.

[7] Includes some claims other than those for wages.

[8] Probably includes some cases submitted in previous year.

[9] Not known.

[10] Includes also amounts collected as part payment of claims still pending.

[11] Based on claims paid.

In addition to the States covered in the preceding table, some work in connection with wage claims was reported for 1935–36 by Indiana, Iowa, Kansas, Montana, Nebraska, North Carolina, Oklahoma, Pennsylvania, Tennessee, Utah, Vermont, Virginia, and West Virginia. Only a few of these offices gave any figures on the number of claims or the amounts involved. The Kansas State Labor Department reported 57 wage claims submitted and $794 collected; the Montana Department of Agriculture, Labor and Industry reported 65 claims submitted; and the Oklahoma Department of Labor, about 102 cases handled by correspondence. The Pennsylvania Department of Labor

and Industries settled two claims—one for $4,760.74, involving 125 employees, and the other for $14. The Georgia labor office stated that it refers all wage claims to the Atlanta Legal Aid Society.

Causes for Nonpayment of Wages

FROM the experience of various State labor offices the principal causes for the nonpayment of wages are found to be—

Plain dishonesty on the part of employers.

Lack of understanding as to the employment agreement, particularly as regards rates of wages.

Insufficient capital for business projects.

Financial reverses or insolvency of employers.

According to the report from the Iowa labor office—

> There is a very great need for legislation in Iowa to provide protection for the employees in securing payment of wages earned. Irresponsible and sometimes dishonest contractors are serious offenders; farm hands have also been unable to collect their wages from tenant farmers and from farm owners victims of foreclosure proceedings; there are also a surprisingly large number of claims for domestic service. In most cases these claims are small and it is evident that there is an intention on the part of the employer to bluff the claimant out of the amount due. Claims against manufacturers are very rare, likewise against retail or wholesale establishments. Hotels, restaurants, and small service establishments, however, are a source of considerable complaint.

In Louisiana employers sometimes allege unsatisfactory service as a reason for failing to pay wages, although frequently the workers affected may have been employed for months. Another explanation for withholding wages is so-called breach of contract, but more often certain employers are declared to be professional "moochers." According to the Michigan Department of Labor and Industry, dissatisfaction with finished work is often reported as the cause for withholding pay in the building trades. In oil drilling, irresponsible groups with insufficient capital drill oil wells and if they strike oil they pay their laborers; if unsuccessful, they do not pay. The Minnesota Division of Women and Children cites fraud as one of the principal causes for the nonpayment of wages.

On the other hand a number of the wage claims presented are found to have no justifiable basis. The Arkansas Bureau of Labor and Statistics reports 92 cases dismissed in the year ended June 30, 1936, because they were erroneously filed, and the Oregon Bureau of Labor points out that there is a large percentage of unjust claims, even though the workers submitting them are apparently sincere.

Legal Authorization for Collection of Wage Claims by State Labor Offices

SOME labor offices have very specific legal powers for enforcing the payment of wages due; others handle wage claims under general authorization given them, or interpreted as given them, by acts

creating their respective offices, or by general wage-payment legislation, and sometimes under provisions drawn from several laws. Many labor offices, however, report that they have no legal authority to enforce the payment of wages, although in spite of this handicap some of these offices come very successfully to the assistance of wage claimants.

A notable example of specific effective legislation in behalf of workers whose wages have been withheld is section 7 of the State wage-collection law,[2] which empowers the labor commissioner of California and his duly authorized representatives to take assignments of wage claims and to prosecute action for the collection of wages, penalties, etc., of persons financially unable to employ counsel in cases in which, in the judgment of the proper labor official, the wage claims are valid and enforceable in the courts; to issue subpenas: to compel the production of papers and records; to administer oaths; to examine witnesses under oaths; and to take depositions and affidavits in order to carry out provisions of the act.

The Michigan Department of Labor, under Act 222, Acts of 1935, may accept assignments of wage claims and sue in local courts.

The authorization under which the New Jersey Department of Labor proceeds in behalf of wage claimants dates back to 1899 (acts of 1899, ch. 38, as amended by acts of 1932, ch. 249) and reads as follows:

> Every person, firm, association, or partnership doing business in this State, and every corporation * * * shall pay at least every 2 weeks, in lawful money of the United States, to each and every employee engaged in his, their, or its business, * * * the full amount of wages earned and unpaid in lawful money to such employee, up to within 12 days of such payment; * * * any employer or employers as aforesaid who shall violate any of the provisions of this section shall, for the first offense, be liable to a penalty of $50, and for the second and each subsequent offense to a penalty of $100, to be recovered by and in the name of the department of labor of this State. On failure to pay the fine imposed, jail sentence up to 200 days shall be imposed.

On October 1, 1935, under chapter 91, acts of 1934, the State of New Jersey set up a wage-collection division in the department of labor, which has authority "to hear disputed cases and render an award which becomes a judgment when filed with the county clerk in the county in which the case originated."

In New York State the industrial commissioner, according to section 211 of the State labor law, is empowered to "cooperate with any employee in the enforcement of a just claim against his employer." Sections 195 to 198 of the labor law provide for the manner in which wage payments are to be made, and sections 1272 and 1275 of the penal code make the failure to pay wages when due and violations of the labor law misdemeanors, punishable by fine or imprisonment or both.

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[2] Acts of 1883, ch. 21, as amended by acts of 1919, ch. 228; 1923, ch. 257; 1929, ch. 231; and 1931, ch. 824.

The head of the Oregon Bureau of Labor, is empowered under a law passed by the 1933 session of the legislature to investigate and attempt to adjust equitably controversies concerning wage claims; to take assignments of such claims in trust for assigning employees; and to make complaint in a criminal court for the violation of the provisions of any law that provides for the payment of wages and imposes a penalty for the violations as for a crime. The same act also creates a contingent fund for the purpose of paying expenses and costs of the commissioner's proceedings under the law.

The Wisconsin Industrial Commission, under subsection (14) of section 101.10 of the Wisconsin Statutes, 1935, investigates and attempts "equitably to adjust controversies between employers and employees as to alleged wage claims and to enforce the provisions of section 103.39, providing for the payment of wages as often as the 15th and on the last day of each month." In pursuance of this duty the commission "may take an assignment in trust for the assigning employee of any wage claim deemed to be valid in the opinion of the commission and not exceeding $100, such assignment to run to the industrial commission. The commission may sue the employer on any wage claim so assigned and the provision of subsection (3) of section 103.39 shall apply."

Among the labor offices reporting wage-collection activities under more general legal authorization are those of Arizona, Pennsylvania, and Wyoming. Included in the group of labor offices which state that they have no legal authority for wage-collection work but despite this draw-back do handle wage claims are those of Connecticut, Montana, Nebraska, Oklahoma, and Virginia.

The labor offices of the following States, which reported no wage collections for the fiscal year, also reported no legal authorization for such procedure: Alabama, Delaware, Florida, Georgia, Illinois, Kentucky, Maryland, Mississippi, Missouri, North Dakota, Ohio, and South Dakota.

Recent Developments in Movement for Better Wage-Payment and Wage-Collection Legislation

A NEW impetus has recently been given to the movement in the interest of indigent wage claimants, through national conferences on labor legislation called by the United States Secretary of Labor. At the second of these conferences, which was held at Asheville, N. C., in 1935, the problem of unpaid wages and the existing legal remedies were discussed at length. At this meeting the Secretary of Labor was requested to appoint a committee "to develop proper types of legislative remedy, and, in cooperation with other interested groups, to prepare an act to serve as a model for State laws." This committee and another appointed by the International Association of Governmental Labor Officials, constituting a joint body, prepared "suggested

language for a State wage-payment and wage-collection law." This language was endorsed by the International Association of Governmental Labor Officials, and received the approval of the third National Conference on Labor Legislation held in Washington, D. C., in November 1936, which recommended that the United States Division of Labor Standards, which had aided the joint committee in its work, be made a clearing house for information in regard to developments in connection with the efforts made to secure legislation along the lines of this approved draft.

Summary of Standard Bill

The principal provisions of this standard bill are as follows: [3]

Every employer (individual or corporation) doing business in the State must pay his employees wages earned semimonthly, on days to be specified in advance by the employer as regular pay days. Furthermore, such wages must be paid in full in lawful money or bank checks convertible into cash at full face value. Discharged employees shall be paid within 24 hours; employees quitting voluntarily shall be paid within 72 hours of leaving or giving notice. When work is suspended as a result of an industrial dispute, wages must be paid at the next regular pay day. The labor commissioner is authorized to enforce the law and also to hold hearings to afford an opportunity to adjust disputes without recourse to court, and to compel the attendance of witnesses, also the production of pay rolls, accounts, and similar documents.

The commissioner is authorized and instructed to cooperate with any employee in the enforcement of any just and valid claim against an employer or contractor, and to that end he may take assignments of wage claims, mechanics' and other workers' liens, not exceeding $200 per claim. In addition, he may prosecute all necessary actions to collect, without having to advance court costs or to give bond or security.

Employees shall be notified of the time and place of payment, of their wage rates, and of the provisions of the law. The employer may also become civilly liable to the employees of his subcontractors. In order to allow the official enforcing the law some discretion, penalties of varying degrees of severity are provided.

The joint committee makes the following comment on the bill:

> The standards embodied in this draft are minimum standards. Some States have more rigorous requirements than those which are here recommended. But in most jurisdictions all these minimum requirements do not exist. For those States which have attained or surpassed these standards they are a basis from which to work in a continued effort to remedy any defects which may arise. For other jurisdictions these standards are a goal toward which to work in order to protect the wage earner and enable him to obtain wages due him. [3]

[3] U. S. Department of Labor. Division of Labor Standards. Reports of Committees and Resolutions Adopted by Third National Conference on Labor Legislation, Washington, D. C., Nov. 9, 10, and 11, 1936. Washington, 1936.

The joint committee points out that additional administrative experience under a measure of this type may call for changes and amendments.

Up to April 15, 1937, according to information received by the United States Bureau of Labor Statistics, three States—Arkansas, New Mexico, and Utah—had enacted legislation based in part on the standard draft approved by the Third National Conference on Labor Legislation. Furthermore, bills following or based in part on this draft had been introduced in the 1937 legislatures of at least 12 other States—Arizona, Connecticut, Idaho, Iowa, Maryland, New Hampshire, North Dakota, Ohio, Pennsylvania, South Carolina, Texas, and Wisconsin.

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Security of Employment in the Engineering Profession [1]

PRIOR to the onset of the depression in 1929, only nonprofessional workers were primarily concerned with the stability and security of employment. The effects of the depression years, however, were such as to bring about a quickening of interest in the subject of economic security even among professional workers. Because of this, a series of questions relating to this subject was incorporated in the Bureau's study of the engineering profession. Data were requested concerning the employment and separation contract, pension privileges, and the medium used to obtain a position; also whether or not the engineer reporting was under civil service, and what his status was with regard to patent rights.

The present article [2] is based upon data supplied by 35,559 engineers who reported the field of engineering engaged in and who had an engineering job in December 1934.[3] Their reports indicate that 68.4 percent of all professional engineers used personal contacts and recommendations to obtain their jobs. Those who used this medium, together with those who obtained their positions through the civil service, formed nearly four-fifths of all reporting.

The degree of economic security among professional engineers, as evidenced by possession of an employment contract covering some period of time, or by pension privileges, was negligible.

In general, there appears to be little restriction upon professional engineers with regard to patent rights to inventions made by them. The extent of restriction, however, depended largely upon the engineer's field of employment and the type of work in which engaged.

Means Used to Obtain Employment

THE data furnished by engineers concerning the medium through which they obtained employment are presented in table 1.

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[1] Prepared by Andrew Fraser, Jr., of the Bureau's Division of Wages, Hours, and Working Conditions.

[2] This is fourth of a series of summary articles covering the results of the study. The previous articles were carried in the Monthly Labor Review for June 1936 and January and April 1937.

[3] The numbers reported in this article as engaged in engineering work in December 1934 cannot be compared with those shown in the discussion of employment. The former were derived from all of the 35,890 engineers who reported the field of engineering in which they were engaged. The discussion of employment dealt with all those older engineers who reported in the 3 years 1929, 1932, and 1934, and all 1930–32 engineers who reported in 1932 and 1934. The grand total, including the 1933–34 engineers, was 35,675.

Of the 35,890 engineers who gave income data in their special field, 331 did not report the year of their birth. Hence, 35,559 constitutes the base for all subsequent relationships with field of engineering engaged in. But 1,458 of these engineers did not report as to type of work engaged in, and hence 34,101 was used as a base figure for all subsequent relationships with functional classification.

These figures demonstrate that for the engineering profession as a whole, placement was not the function of any particular organization. The vast majority of professional engineers obtained their jobs through personal contacts and recommendations. This was the means used to find the position held in 1934 by no less than 68.4 percent of the 35,559 engineers who also reported the field of engineering activity in which they were engaged. This medium of employment was reported by three-quarters of the chemical, electrical, and mining and metallurgical engineers, and by slightly more than 70.0 percent of the mechanical and industrial engineers, but by only 61.7 percent of the civil engineers. The civil engineers, however, found more positions through civil service agencies; in fact, 2,941, or 80.0 percent, of the 3,706 engineers who were classified under this medium, were civil engineers. This is further emphasized by a consideration of the data for the five professional classes. Of the engineers who had engineering jobs in December 1934, 19.8 percent of the civil engineers stated that these were found through the civil service, whereas among the remaining four professional classes, the range was from only 2.5 percent for the chemical and ceramic engineers to 4.6 percent for the mining and metallurgical engineers.

It will, however, be noted that personal contacts and recommendations, together with civil service, accounted for 74.2 percent of the mechanical and industrial engineers. For each of the remaining professional classes, these two mediums covered approximately four-fifths of their respective totals, ranging from 78.4 percent of the chemical and ceramic to 81.5 percent of the civil engineers. Mechanical and industrial engineers reported relatively higher percentages of jobs obtained through an engineering society, a private employment agency, and newspapers. The most significant differences, however, will be noted for "medium not reported" and "any other medium." Thus, only in the case of civil, and mining and metallurgical, engineers did "any other medium" embrace smaller proportions than those classified under "medium not reported." For the other three professional classes, this condition was reversed. "Any other medium" may well include a substantial number placed through their colleges, a point not covered in the questionnaire and one likely to affect the percentage noted in this classification.

Although the percentage distributions for the remaining avenues to employment do not embrace large numbers of each professional class, relatively they do present some striking contrasts. Only 2.4 percent of all engineers reported that they obtained their position through an engineering society. Some 3.7 and 2.7 percent respectively of the mechanical and industrial, and mining and metallurgical engineers were so classified. For the three remaining professional classes, the percentages ranged from 1.4 to 1.9. Despite the fact that so few engineers reported an engineering society as their employment

medium, it must be recognized that such societies are an important factor in obtaining employment for professional engineers. It is obvious that through their members there must inevitably be a pooling of information on employment prospects, both locally and nationally. Furthermore, the officials of the various societies are kept in close touch with local and national employment conditions as a result of their meetings and conventions; but such appointments as are made would depend rather upon personal contacts and recommendations than upon contacts made through the society's employment service. The fact, therefore, that only 2.4 percent of all engineers reported the engineering society as their medium of employment must be interpreted in the light of these conditions.

Table 1.—Distribution of All Engineers Reporting Medium of Obtaining Employment, by Professional Class, at End of 1934

Medium used to obtain employment	Engineers utilizing each specified medium					
	All professional classes	Chemical and ceramic engineers	Civil, agricultural, and architectural engineers	Electrical engineers	Mechanical and industrial engineers	Mining and metallurgical engineers
	Number					
All mediums	35,559	2,538	14,861	6,816	9,833	1,511
Personal contacts and recommendations	24,312	1,927	9,179	5,106	6,960	1,140
Civil service	3,706	63	2,941	289	343	70
Engineering society	841	36	274	130	360	41
Private employment agency	576	49	113	112	285	17
Newspapers	567	27	152	120	255	13
Technical journals	363	54	142	64	85	18
United States Employment or Reemployment Service	264	7	190	14	46	7
Other public employment service	268	15	169	26	54	4
Any other medium	2,551	259	706	655	849	82
Medium not reported	2,111	101	995	300	596	119
	Percent					
All mediums	100.0	100.0	100.0	100.0	100.0	100.0
Personal contacts and recommendations	68.4	75.9	61.7	75.0	70.7	75.4
Civil service	10.4	2.5	19.8	4.2	3.5	4.6
Engineering society	2.4	1.4	1.8	1.9	3.7	2.7
Private employment agency	1.6	1.9	.8	1.6	2.9	1.1
Newspapers	1.6	1.1	1.0	1.8	2.6	.9
Technical journals	1.0	2.1	1.0	.9	.9	1.2
United States Employment or Reemployment Service	.7	.3	1.3	.2	.5	.5
Other public employment service	.8	.6	1.1	.4	.5	.3
Any other medium	7.2	10.2	4.8	9.6	8.6	5.4
Medium not reported	5.9	4.0	6.7	4.4	6.1	7.9

The securing of employment through newspapers and technical journals was reported by 1.6 and 1.0 percent, respectively, of all engineers making returns. It will be noted however that, relatively, electrical and mechanical and industrial engineers found more jobs through newspapers than did any of the other professional classes;

this medium was reported by 1.8 percent of the electrical and 2.6 percent of the mechanical and industrial engineers, whereas among the other classes the highest percentage was 1.1. On the other hand, technical journals as a medium of employment were of more assistance to chemical and ceramic engineers (2.1 percent); among the remaining professional classes percentages ranged from 0.9 to 1.2.

Private employment agencies were used by only 1.6 percent of all engineers reported. When considered together, the two public employment agencies embraced approximately the same proportion, namely, 1.5 percent. A similar comparison among the five professional classes showed that, relatively, public agencies were of more importance to civil engineers, of whom 2.4 percent so reported, whereas the next highest percentage was 1.0 percent for mechanical and industrial engineers. Only 0.8 percent of the civil engineers used private employment agencies to obtain jobs, but 2.9 percent of the mechanical and industrial engineers did so; for the remaining professional classes, the percentages ranged from 1.1 to 1.9 percent.

Economic Security in the Engineering Profession

A WRITTEN contract of employment and pension privileges are two important criteria of economic security. The efficacy of any such schemes, however, depends to a marked extent upon the nature of the employment. This is demonstrated by a comparison of the data concerning economic security among professional engineers who reported as being engaged in public engineering, personal service, and private engineering.

Civil-service status.—The importance of civil-service status as a factor in stability of employment is shown in table 2.

Table 2.—Distribution of All Engineers Reporting as to Civil-Service Status, by Field of Employment and Professional Class, at End of 1934

Field of employment and professional class	Number				Percent			
	Total	Without status	With status	Not reporting	Total	Without status	With status	Not reporting
Federal Government	4,649	2,084	2,250	315	100.0	44.8	48.4	6.8
Chemical and ceramic	74	22	44	8	100.0	29.7	59.5	10.8
Civil, agricultural, and architectural	3,620	1,649	1,734	237	100.0	45.6	47.9	6.5
Electrical	306	143	138	25	100.0	46.7	45.1	8.2
Mechanical and industrial	549	240	272	37	100.0	43.7	49.6	6.7
Mining and metallurgical	100	30	62	8	100.0	30.0	62.0	8.0
State and county governments	4,438	2,487	1,604	347	100.0	56.1	36.1	7.8
Chemical and ceramic	37	30	3	4	100.0	81.1	8.1	10.8
Civil, agricultural, and architectural	4,044	2,203	1,535	306	100.0	54.4	38.0	7.6
Electrical	134	91	33	10	100.0	67.9	24.6	7.5
Mechanical and industrial	170	123	28	19	100.0	72.3	16.5	11.2
Mining and metallurgical	53	40	5	8	100.0	75.5	9.4	15.1
Municipal governments	2,090	1,028	952	110	100.0	49.1	45.6	5.3
Chemical and ceramic	54	28	23	3	100.0	51.8	42.6	5.6
Civil, agricultural, and architectural	1,617	829	709	79	100.0	51.3	43.8	4.9
Electrical	238	88	136	14	100.0	37.0	57.1	5.9
Mechanical and industrial	158	70	77	11	100.0	44.3	48.7	7.0
Mining and metallurgical	23	13	7	3	100.0	56.6	30.4	13.0

Despite the fact that in all 11,177 of the engineers reporting were in the employ of public authorities in December 1934, only 45.0 percent of them reported as being under civil service. The proportion of all engineers with civil-service status was 48.4 percent in the case of positions under the Federal Government, and for employment under State and county, and municipal governments, 36.1 and 45.6 percent, respectively. This percentage under civil service of these engineers employed by the Federal Government was higher than in the two other public employments, despite the enormous increase in Federal Government employment by December 1934, because of the amount of temporary employment under the work-relief programs; it may be assumed that relatively few of the engineers so employed would be classified under civil service. Consequently, under normal circumstances, the proportion of all engineers under civil service with the Federal Government would be higher than 48.4 percent. On the other hand, with regard to the other two classes of public engineering, it will be recalled that the numbers of engineers so engaged remained comparatively stable over the period 1930–34. Hence, the proportions reported as being under civil service are representative of the situation.

The relative proportions of each professsional class under civil service differed very markedly among the three classes of public engineering employment. The smallest range occurred in Federal positions—from 45.1 percent for electrical engineers to 62.0 percent for mining and metallurgical engineers. These two professional classes also constituted the extremes of the range of the proportions embraced by municipal governments, but in reverse order. Thus, of the mining and metallurgical engineers in municipal employment 30.4 percent, and of the electrical engineers 57.1 percent, had civil-service status. Relatively, the smallest numbers of each professional class under civil service were found in State and county governments. This is best exemplified by the comparative data for civil engineers; of their number, 47.9 and 43.8 percent respectively, in Federal and municipal employments, but only 38.0 percent in State and county positions, had civil-service status. But since the civil engineers comprised approximately 80.0 percent of the 5,038 engineers who were under civil service, it is obvious that such a status is a significant contributory factor to the stability of employment.

The employment contract.—For the engineering profession as a whole, the data in table 3 clearly evidence a lack of economic security in terms of a written contract which would secure employment over a substantial period of time. In all, only 3,169, or 8.9 percent, of the 35,559 engineers who reported employment in an engineering field [4]

[4] Throughout the whole of this discussion, only engineering employment is considered. Consequently, no cognizance has been taken of the economic security of engineers engaged in nonengineering employment.

were covered by written contract. Of these, some 0.8 percent had a contract for less than 1 year, 3.5 percent a contract for between 1 and 2 years, and only 0.9 percent for 2 years or more. Engineers who did not report as to period of contract formed 3.7 percent of the whole. No less than 91.1 percent either answered "No" or did not furnish specific information.

Table 3.—Distribution of All Engineers Reporting Employment Contract, by Field of Employment, at End of 1934

Field of employment	Number						Percent					
	Total	Under contract for—			Under contract, no period reported	Not reporting [1]	Total	Under contract for—			Under contract, no period reported	Not reporting [1]
		Under 1 year	1 and under 2 years	2 years and over				Under 1 year	1 and under 2 years	2 years and over		
All fields	35,559	295	1,234	330	1,310	32,390	100.0	0.8	3.5	0.9	3.7	91.1
Private engineering	21,604	212	298	99	637	20,358	100.0	1.0	1.4	.5	2.9	94.2
Construction	3,437	32	63	12	113	3,217	100.0	.9	1.8	.3	3.3	93.7
Extractive industries	1,841	11	21	6	60	1,743	100.0	.6	1.1	.3	3.3	94.7
Public utilities	4,183	16	21	8	50	4,088	100.0	.4	.5	.2	1.2	97.7
Transportation	1,255	5	4	2	17	1,227	100.0	.4	.3	.2	1.4	97.7
Manufacturing	10,888	148	189	71	397	10,083	100.0	1.4	1.7	.7	3.6	92.6
Public engineering	11,177	53	224	121	295	10,484	100.0	.5	2.0	1.1	2.6	93.8
Federal Government	4,649	33	42	34	181	4,359	100.0	.7	.9	.7	3.9	93.8
State and county governments	4,438	15	125	50	81	4,167	100.0	.3	2.8	1.1	1.8	94.0
Municipal governments	2,090	5	57	37	33	1,958	100.0	.2	2.7	1.8	1.6	93.7
Personal service	2,778	30	712	110	378	1,548	100.0	1.1	25.6	4.0	13.6	55.7

[1] Also includes those who reported "No", which number could not be separated in the tabulation.

Comparison of the positive returns on employment contract from all engineers in the three broad fields of engineering employment shows that use of the contract was most common in personal service—primarily education.

For engineers under contract in the personal service field the most common contract period (reported by 25.6 percent of the 2,778 engineers so engaged) was from 1 to 2 years. Some 4.0 percent were under contract for periods of 2 years or longer. Although the corresponding percentages for public engineering were much lower than for personal service, they were higher than for private engineering. For employment contracts under 1 year, however, private exceeded public engineering (1.0 percent, as against 0.5 percent). Of all reporting engineers engaged in public engineering, 2.0 percent had contracts for 1 and under 2 years, and 1.1 percent for periods of 2 years and over. The corresponding percentages for private engineering were 1.4 and 0.5 percent.

For the separate fields of employment under private engineering, relatively the largest proportion of engineers under contract in their jobs occurred in manufacturing, with 408, or 3.8 percent of the 10,888,

reporting as so engaged. In the construction and extractive industries 3.0 and 2.0 percent, respectively, had written contracts. The smallest proportions under contract were reported by engineers in the employ of public utilities or engaged in transportation (1.1 and 0.9 percent, respectively). There was a marked contrast in contract status between Federal positions and those in the two other categories of public engineering. Thus, while only 2.3 percent of the 4,649 reporting engineers in Federal employ were on contract, the proportion working on this basis for State and county and for municipal governments formed respectively 4.2 and 4.7 percent of their grand totals.

The type of work in which engineers under contract were engaged is presented in table 4.

In general, the distribution followed the same trend as shown in table 3, that is to say, the largest groups had written contracts for periods from 1 and under 2 years. Table 4 also confirms the previous finding that engineers engaged in teaching are relatively more secure with regard to employment than other members of the engineering profession: 33.8 percent of their number reported written contracts for periods of from 1 to 2 years. Sales employments, next in order, had under contract for a similar period only 3.9 percent of their 1,513 reporting engineers, and general administration and management only 2.3 percent. Each of the other types of work had less than 2.0 percent. Even for the contract periods of 2 years and over, teaching covered 4.8 percent of the total reported for this type of work. The next highest percentage, namely, 1.5, was reported for general administration and management. In no one of the remaining employments did the percentage of engineers with written contracts for 2 years and over exceed 0.8 percent.

Table 4.—Distribution of All Engineers Reporting Employment Contract, by Type of Work Engaged in, at End of 1934

Type of work	Number						Percent					
	Total	Under contract for—			Under contract, no period reported	Not reporting [1]	Total	Under contract for—			Under contract, no period reported	Not reporting [1]
		Under 1 year	1 and under 2 years	2 years and over				Under 1 year	1 and under 2 years	2 years and over		
All types	34,101	288	1,196	311	1,236	31,070	100.0	0.8	3.5	0.9	3.6	91.2
Design and research	9,050	106	119	52	305	8,468	100.0	1.2	1.3	.6	3.4	93.5
Construction	8,233	39	153	63	209	7,769	100.0	.5	1.9	.8	2.5	94.3
Operation	8,276	57	79	38	148	7,954	100.0	.7	1.0	.5	1.8	96.0
Consulting	2,146	26	30	11	80	1,999	100.0	1.2	1.4	.5	3.7	93.2
Teaching	2,050	24	692	98	350	886	100.0	1.2	33.8	4.8	17.1	43.1
Sales	1,513	15	59	7	56	1,376	100.0	1.0	3.9	.5	3.7	90.9
General administration and management	2,833	21	64	42	88	2,618	100.0	.7	2.3	1.5	3.1	92.4

[1] Also includes those who reported "No", which number could not be separated in the tabulation.

Thus, with regard to fields of employment or the types of work within them, the engineering profession cannot be said to have any substantial security of employment provided through a written contract for a period of time. On the other hand, professional engineers are not generally restricted with regard to the seeking of employment similar to that in which they may be engaged. This is evidenced by a consideration of the data furnished by professional engineers concerning their separation contract status (tables 5 and 6).

Table 5.—Distribution of All Engineers Reporting Separation Contract, by Field of Employment, at End of 1934

Field of employment	Number						Percent					
	Total	Under contract for—			Under contract, no period reported	Not reporting [1]	Total	Under contract for—			Under contract, no period reported	Not reporting [1]
		Under 1 year	1 and under 2 years	2 years and over				Under 1 year	1 and under 2 years	2 years and over		
All employments	35,559	287	77	128	95	34,972	100.0	0.8	0.2	0.4	0.3	98.3
Private engineering	21,604	180	67	124	38	21,195	100.0	.8	.3	.6	.2	98.1
Construction	3,437	32	5	8	10	3,382	100.0	.9	.1	.2	.3	98.5
Extractive industries	1,841	19	1	2	4	1,815	100.0	1.0	.1	.1	.2	98.6
Public utilities	4,183	16	2	2	4	4,159	100.0	.4	(2)	(2)	.1	99.5
Transportation	1,255	2	------	------	2	1,251	100.0	.2	------	------	.2	99.6
Manufacturing	10,888	111	59	112	18	10,588	100.0	1.0	.5	1.0	.2	97.3
Public engineering	11,177	50	3	2	26	11,096	100.0	.4	(2)	(2)	.2	99.4
Federal Government	4,649	16	1	2	8	4,622	100.0	.3	(2)	(2)	.2	99.5
State and county governments	4,438	27	1	------	10	4,400	100.0	.6	(2)	------	.2	99.2
Municipal governments	2,090	7	1	------	8	2,074	100.0	.3	(2)	------	.4	99.3
Personal service	2,778	57	7	2	31	2,681	100.0	2.1	.3	.1	1.1	96.4

[1] Also includes those who reported "No", which number could not be separated in the tabulation.
[2] Less than 1/10 of 1 percent.

Table 6.—Distribution of All Engineers Reporting Separation Contract, by Type of Work Engaged in, at End of 1934

Type of work	Number						Percent					
	Total	Under contract for—			Under contract, no period reported	Not reporting [1]	Total	Under contract for—			Under contract, no period reported	Not reporting [1]
		Under 1 year	1 and under 2 years	2 years and over				Under 1 year	1 and under 2 years	2 years and over		
All types	34,101	274	72	122	93	33,540	100.0	0.8	0.2	0.4	0.3	98.3
Design and research	9,050	68	33	62	15	8,872	100.0	.8	.4	.7	.2	97.9
Construction	8,233	45	9	2	18	8,159	100.0	.5	.1	(2)	.2	99.2
Operation	8,276	52	12	33	16	8,163	100.0	.6	.1	.4	.2	98.7
Consulting	2,146	10	------	9	8	2,119	100.0	.5	------	.4	.4	98.7
Teaching	2,050	51	6	------	31	1,962	100.0	2.5	.3	------	1.5	95.7
Sales	1,513	28	6	5	1	1,473	100.0	1.9	.4	.3	.1	97.3
General administration and management	2,833	20	6	11	4	2,792	100.0	.7	.2	.4	.1	98.6

[1] Also includes those who reported "No", which number could not be separated in the tabulation.
[2] Less than 1/10 of 1 percent.

Only 1.4 percent of all the reporting engineers stated that they were under a contract for a definite period of time during which they bound themselves not to seek similar employment. This included 0.8 percent whose separation contracts were for less than 1 year, 0.2 percent for a period of from 1 to 2 years, and 0.4 percent for 2 years and over. Clearly, restrictions upon professional engineers with regard to new employment were few.

It will, however, be noted in table 5 that 2.1 percent of the reporting engineers in personal service were under separation contracts for less than 1 year, whereas the proportion in extractive industries and manufacturing was 1.0 percent each. The reason for the relatively greater use of the separation contract in personal service is not clear. In the case of extractive industries and manufacturing, the use of secret processes probably makes necessary some protection for the employer. It is, however, very evident that even for these fields such a contract is seldom required. This freedom from restriction with regard to other employment is also apparent from table 6. Only two types of work—teaching and sales—covered more than 1.0 percent of their respective totals, and in neither case did the period of contract exceed 1 year. In the teaching profession 2.5 percent of the engineers were under separation contract and in sales 1.9 percent; none of the other groups exceeded 0.8 percent. Notwithstanding, it is significant that some 0.7 percent of the engineers engaged in design and research were under separation contract for periods for 2 years and over.

Provision for retirement on pension.—An analysis of the data furnished by professional engineers concerning their pension privileges is presented in table 7.

Table 7.—Distribution of All Engineers Reporting Pension Privileges, by Field of Employment, at End of 1934

Field of employment	Number					Percent				
	Total	No pension	Pension privilege		Not reporting	Total	No pension	Pension privilege		Not reporting
			Contributory plan	Noncontributory plan				Contributory plan	Noncontributory plan	
All employments	35,559	20,556	6,684	3,957	4,362	100.0	57.8	18.8	11.1	12.3
Private engineering	21,604	13,207	2,265	3,387	2,745	100.0	61.1	10.5	15.7	12.7
Construction	3,437	2,445	174	138	680	100.0	71.1	5.1	4.0	19.8
Extractive industries	1,841	1,109	272	200	260	100.0	60.2	14.8	10.9	14.1
Public utilities	4,183	1,833	341	1,555	454	100.0	43.7	8.2	37.2	10.9
Transportation	1,255	576	120	416	143	100.0	45.9	9.6	33.1	11.4
Manufacturing	10,888	7,244	1,358	1,078	1,208	100.0	66.5	12.5	9.9	11.1
Public engineering	11,177	5,791	3,827	357	1,202	100.0	51.8	34.2	3.2	10.8
Federal Government	4,649	1,850	2,009	248	542	100.0	39.8	43.2	5.3	11.7
State and county governments	4,438	2,723	1,193	58	464	100.0	61.3	26.9	1.3	10.5
Municipal governments	2,090	1,218	625	51	196	100.0	58.3	29.9	2.4	9.4
Personal service	2,778	1,558	592	213	415	100.0	56.1	21.3	7.7	14.9

As of December 1934 almost one-third (10,641) of the 35,559 professional engineers reporting who had engineering jobs at that time stated that they had pension privileges. Of this number, 6,684, or 18.8 percent, were covered by contributory pension schemes, and 3,957, or 11.1 percent by noncontributory schemes. Some 57.8 percent were in employments for which no pension provision had been made. About 12.3 percent did not furnish information.

Of the engineers in pensionable positions, the smallest relative proportion, 26.2 percent, were engaged in private engineering. By contrast, 37.4 percent of the engineers engaged in public engineering and 29.0 percent of those in personal service had pension privileges. It will also be noted that for public engineering and personal service the contributory scheme predominated. On the other hand, of the engineers engaged in private engineering, the largest proportion was covered by noncontributory systems. However, within the private-engineering group marked differences were shown; the same was true of the three categories of public engineering.

The largest number of professional engineers covered by a pension plan were those in the employ of the Federal Government. Out of a total employment of 4,649 engineers reporting, 43.2 percent were under a contributory and only 5.3 percent under a noncontributory plan. The corresponding proportions in positions with State and county, and municipal governments were very much less—26.9 and 1.3 percent, and 29.9 and 2.4 percent, respectively. This order of difference parallels that of the proportions of engineers under civil service in these three classes of employment, but only in the case of the Federal Government are the two proportions closely related. This arises from the fact that, whereas all persons under Federal civil service must contribute to the retirement fund, this is not true to the same extent for employments under State and county, and municipal governments, where age, length of service, and salary are also taken into consideration.

Among the remaining fields of employment, public utilities and transportation reported the next highest proportions (after Federal employment) as having pension privileges. Public utilities and transportation used the noncontributory scheme; this type of plan covered 37.2 percent in utilities and 33.1 percent in transportation; contributory systems covered only 8.2 and 9.6 percent, respectively, of those reporting. For the three remaining pursuits shown under private engineering, the largest number of engineers with pension privileges did not exceed 25.7 percent, and in all cases contributory schemes predominated.

From the preceding discussion of the pension privileges it is quite evident that the kind of employment has a marked effect upon the question of the installation of a pension scheme. In no type of

engineering employment was a majority of the reporting engineers protected by such a plan.

Patent Privileges in the Engineering Profession

INFORMATION as to patent privileges was furnished by 61.6 percent of the 35,559 reporting engineers with engineering jobs at the end of 1934 (table 8).

Of all engineers covered, 31.7 percent reported retention of the patent rights for all inventions made either in the course of their work or in fields not directly related to their work. Among the nine separate fields of employment this was true of the largest group in each case, except in manufacturing where the highest proportion (30.1 percent) reported that they had no rights to patents relating to their work, but did retain their rights to those not directly related to their work. This latter combination ("(1) No, (2) Yes", in table 8) ranked second in importance and included 16.9 percent of the 35,559 engineers. The third group in importance (including 4,575, or 12.9 percent) was that reporting complete restriction on both aspects of patent privileges. Only 42 engineers, less than one-tenth of 1 percent of the total, reported that they retained the rights to inventions connected with their duties but not to those not so connected.

Table 8.—Distribution of All Engineers Reporting Patent Rights, by Field of Employment

Field of employment	Right retained to inventions (1) made in the course of work, and (2) not directly related to work					
	Total	(1) Yes; (2) yes	(1) Yes; (2) no	(1) No; (2) yes	(1) No; (2) no	Not reporting
	Number					
All employments	35,559	11,263	42	6,017	4,575	13,662
Private engineering	21,604	6,499	29	4,801	3,279	6,996
Construction	3,437	1,178	5	294	405	1,555
Extractive industries	1,841	601	2	342	288	608
Public utilities	4,183	1,771	6	670	374	1,362
Transportation	1,255	434	3	217	143	458
Manufacturing	10,888	2,515	13	3,278	2,069	3,013
Public engineering	11,177	3,364	10	946	1,150	5,707
Federal Government	4,649	1,009	3	582	567	2,488
State and county governments	4,438	1,587	5	249	386	2,211
Municipal governments	2,090	768	2	115	197	1,008
Personal service	2,778	1,400	3	270	146	959
	Percent					
All employments	100.0	31.7	0.1	16.9	12.9	38.4
Private engineering	100.0	30.1	.1	22.2	15.2	32.4
Construction	100.0	34.3	.1	8.6	11.8	45.2
Extractive industries	100.0	32.6	.1	18.6	15.6	33.1
Public utilities	100.0	42.4	.1	16.0	8.9	32.6
Transportation	100.0	34.6	.2	17.3	11.4	36.5
Manufacturing	100.0	23.1	.1	30.1	19.0	27.7
Public engineering	100.0	30.1	.1	8.5	10.3	51.0
Federal Governments	100.0	21.7	.1	12.5	12.2	53.5
State and county governments	100.0	35.8	.1	5.6	8.7	49.8
Municipal governments	100.0	36.7	.1	5.5	9.4	48.3
Personal service	100.0	50.4	.1	9.7	5.3	34.5

It would seem that, comparatively, there is only slight restriction on the retention of patent rights among professional engineers, although its extent varies in the different fields of employment. Thus, relatively, the greatest restriction was placed upon engineers engaged in manufacturing, 19.0 percent of whom reported complete restriction, 30.1 percent the right to patent inventions not directly related to their work but not to those made in the course of their work, and only 23.1 percent no restrictions. In the extractive industries the limitations, while less severe than in manufacturing, were nevertheless greater than in any of the other branches of private engineering. Complete restriction was reported by 15.6 percent of the engineers in the extractive industries, by 11.8 percent of those in construction, and by 11.4 percent of those in transportation; the smallest proportion, 8.9 percent, was reported for engineers in the employ of public utilities.

It has already been noted that in manufacturing some 30.1 percent of the engineers so engaged had the right to patent inventions not directly related to their work, but not to those made in the course of their work. This partial restriction was very much less for the remaining fields of activity in private engineering. In the case of extractive industries, only 18.6 percent so reported, in transportation 17.3 percent, and in public utilities 16.0 percent. Partial restriction affected only 8.6 percent of the engineers engaged in construction. These same four fields of activity did, however, report larger proportions as being unrestricted with regard to patent privileges. These ranged from 32.6 percent for extractive industries to 42.4 percent for public utilities. In this regard, it will be recalled that only 23.1 percent of the engineers in manufacturing so reported.

In the three classes of public engineering, there was a marked divergence in the restrictions placed upon patent privileges. This was greatest for engineers in the employ of the Federal Government, 12.2 percent of whom had no patent privileges whatsoever; whereas in State and county, and municipal governments, only some 9.0 percent were under complete restriction. Partial restriction affected 12.5 percent of the Federal Government engineers, but only about 5.5 percent of those in the other two public employments. The greatest divergence occurred for those engineers who reported they had the right to patents made in the course of their work and also to those not directly related to their work. This group included only 21.7 percent of Federal Government engineers, whereas for State and county, and municipal governments, the percentages reported were respectively 35.8 and 36.7.

Relative to all other fields of employment, the least restrictions were found in persounal service, where 50.4 percent reported unrestricted patent rights, 9.7 percent partial restriction, and only 5.3 percent no patent privileges. This freedom from restriction in the

retention of patent rights for engineers in the personal service group was due to the preponderance of teachers in this group, as examination of table 9, giving the distribution by type of work engaged in, shows.

Table 9.—Distribution of All Engineers Reporting Patent Rights, by Type of Work Engaged in, at End of 1934

Type of work	Right retained to inventions (1) made in the course of work, and (2) not directly related to work					
	Total	(1) Yes; (2) yes	(1) Yes; (2) no	(1) No; (2) yes	(1) No; (2) no	Not reporting
	Number					
All types	34,101	10,828	40	5,779	4,401	13,053
Design and research	9,050	2,128	13	2,404	1,430	3,075
Construction	8,233	2,730	8	717	892	3,886
Operation	8,276	2,737	10	1,494	1,108	2,927
Consulting	2,146	695	3	202	246	1,000
Teaching	2,050	1,132	3	199	90	626
Sales	1,513	453	2	310	293	455
General administration and management	2,833	953	1	453	342	1,084
	Percent					
All types	100.0	31.8	0.1	16.9	12.9	38.3
Design and research	100.0	23.5	.1	26.6	15.8	34.0
Construction	100.0	33.2	.1	8.7	10.8	47.2
Operation	100.0	33.1	.1	18.1	13.4	35.3
Consulting	100.0	32.4	.1	9.4	11.5	46.6
Teaching	100.0	55.3	.1	9.7	4.4	30.5
Sales	100.0	29.9	.1	20.5	19.4	30.1
General administration and management	100.0	33.6	(1)	16.0	12.1	38.3

[1] Less than 1/10 of 1 percent.

Engineers engaged in teaching were under the least restriction as to the retention of patent rights, and engineers in design and research were under the greatest restriction. Of the 9,050 engineers classified as working in design and research, only 23.5 percent had the right both to patents made in the course of their work and to those not directly related to their work. As many as 55.3 percent of the engineers engaged in the teaching of engineering subjects so reported. For the remaining five lines of work, the proportions with full rights to patents ranged from 29.9 percent in sales to 33.6 percent in general administration and management.

Relatively, the largest proportion of engineers who were partially restricted in regard to patent rights (26.6 percent) was reported for design and research. Even in the case of sales, some 20.5 percent were classified under this "No–Yes" combination. By contrast, only 18.1 percent of the engineers engaged in operation and 16.0 percent in general administration and management were restricted only as to patents relating to their work. The corresponding proportions in construction, consulting, and teaching were very much less, ranging from 8.7 in construction to 9.7 in teaching.

The largest relative percentage completely restricted was 19.4—for the engineers engaged in sales—with design and research following next in order (15.8 percent). From this point the proportion ranged downward to 13.4 percent in operation, 12.1 percent in general administration and management, 11.5 percent in consulting, and 10.8 percent in construction. The lowest percentage under complete restriction, namely 4.4, was noted in teaching.

SOCIAL SECURITY

Expenditures Under the Social Security Act in 1936[1]

TOTAL disbursements of over 115 million dollars were made by the Federal Government under the terms of the Social Security Act during the first year of operation, ended December 31, 1936, according to data recently compiled by the Federal Social Security Board. Larger sums will be required to meet costs in the current year but it will not be until after 1942 that the charges will approach the maximum required to meet Federal commitments arising under this legislation. The largest single item of expenditure, $83,145,-550.61, in the year for which figures are available, was devoted to aiding the needy aged under title I of the law; next in importance was the $10,498,608.07 for aid to dependent children under title IV; the other items ranged from $633,046 for child welfare to $6,335,195 for extending public health. In the table following, the disbursements are shown for the first half and second half of the year separately and for both periods together, classified by the purpose for which the amounts were used.

Disbursements of Federal Government Under Social Security Act, 1936

Purpose	January 1 to June 30	July 1 to December 31	Total
Total disbursements [1]	$34,909,465.02	$80,095,934.85	$115,005,399.87
Aid to the needy aged	24,653,593.90	58,491,956.71	83,145,550.61
Unemployment compensation administration	937,567.54	1,810,765.14	2,748,332.68
Aid to dependent children	2,481,909.72	8,016,698.35	10,498,608.07
Maternal and child health [1]	1,239,234.01	1,317,798.79	2,557,032.80
Crippled children	698,172.65	1,007,572.37	1,705,745.02
Child welfare	224,704.12	408,342.24	633,046.36
Vocational rehabilitation	350,000.00	[2] 420,500.00	[2] 770,500.00
Extending public health	2,451,140.79	3,884,054.41	6,335,195.20
Social Security Board administration	584,844.14	2,399,063.05	2,983,907.19
Aid to the blind	1,288,298.15	2,339,183.79	3,627,481.94

[1] Exclusive of amounts expended for administration and research under title V, amounting to $76,936.38, and disbursements of the Children's Bureau, U. S. Department of Labor.
[2] Preliminary; subject to revision.

Old-age assistance.—Grants for old-age assistance, representing about three-fourths of the total disbursements in 1936, were made to 42 States cooperating under title I of the act. It is estimated that

[1] Some of these data are from Social Security Board, Bureau of Research and Statistics—Financing the Social Security Act, by Eleanor L. Dulles, Washington, 1937; see also First Annual Report of the Social Security Board and its other publications.

over 1,300,000 aged persons were thus assisted. In November three States—Colorado, Oklahoma, and Texas—reported payments to more than 30 percent of the estimated population over 65. In contrast, 11 States reported that less than 10 percent of those in this age group were being aided. The average amount of the monthly payments to the aged varied considerably also, ranging from $3.60 to $31.54 from Federal, State, and local funds in November.

Unemployment compensation.—Altogether, 36 unemployment compensation plans were approved in 1936 under title III. Of this number, Federal grants were made under 19 laws as follows:

Alabama	$144,062.39	New York	$904,950.48
California	252,661.34	Oregon	100,191.31
Colorado	7,729.50	Pennsylvania	64,600.00
District of Columbia	80,893.73	Rhode Island	69,351.14
Idaho	35,975.05	South Carolina	55,006.98
Indiana	168,283.18	Texas	84,875.06
Louisiana	46,090.62	Utah	44,759.05
Massachusetts	202,449.96	Wisconsin	217,733.84
Mississippi	75,874.14		
New Hampshire	185,304.91	Total	2,748,332.68
New Mexico	7,540.00		

These sums were allocated to administrative costs, Wisconsin being the only State making unemployment-compensation payments during 1936. The laws of 17 additional States were approved shortly before the close of the year, but no grants were made to them until 1937. This group was composed of Arizona, Connecticut, Iowa, Kentucky, Maine, Maryland, Michigan, Minnesota, New Jersey, North Carolina, Ohio, Oklahoma, South Dakota, Tennessee, Vermont, Virginia, and West Virginia.

Dependent children.—Of the 10½ million dollars devoted to aiding dependent children, California, New Jersey, and Wisconsin benefited by over 1 million dollars each. The disbursements to other States ranged as low as $5,792. Aid was granted in the District of Columbia and 27 States: Alabama, Arizona, Arkansas, California, Colorado, Delaware, Idaho, Indiana, Louisiana, Maine, Maryland, Massachusetts, Michigan, Mississippi, Nebraska, New Hampshire, New Jersey, New Mexico, Ohio, Oklahoma, Pennsylvania, Utah, Vermont, Washington, West Virginia, Wisconsin, and Wyoming.

Aid to the blind.—Over one-third of the total grants for aid to the blind was expended in Pennsylvania ($1,418,640.27); California, which received $636,646.50, was the only other State to receive more than one-half million dollars. Assistance of this kind was granted to the District of Columbia and 28 States as follows: Arizona, Arkansas, California, Colorado, Connecticut, Idaho, Indiana, Maine, Maryland, Massachusetts, Michigan, Mississippi, Nebraska, New Hampshire, New Jersey, New Mexico, North Carolina, North Dakota, Ohio

Oklahoma, Oregon, Pennsylvania, Utah, Vermont, Washington, West Virginia, Wisconsin, and Wyoming.

Maternal and child health.—The Children's Bureau has approved plans for maternal and child-health services for 51 jurisdictions (including the 48 States, Alaska, the District of Columbia, and Hawaii). In addition, aid has also been granted by the Children's Bureau under 42 plans for service to crippled children and under 42 plans for child welfare.

Vocational rehabilitation.—The Social Security Act also provides an extension of vocational rehabilitation through the United States Office of Education. Appropriations for this purpose are in addition to appropriations received by the several States under the Vocational Rehabilitation Act of 1920.

Agreement for Retirement Plan for Railroad Employees

A NEW retirement plan for railroad employees has been agreed upon between the representatives of the 21 standard railroad labor unions and the railway managements.[1] The agreement was arrived at after joint negotiations initiated January 7, 1937, in response to a letter from President Roosevelt suggesting conferences of the parties to work out a mutually satisfactory employees' pension plan as a substitute for the existing one. The Railroad Employees' Retirement Act of 1935[2] was held unconstitutional in part by the United States Supreme Court on June 26, 1936.[3] The new plan, it is hoped, will, if enacted into law, remedy the situation resulting from the Supreme Court decision. To make the new plan effective, two acts will have to be passed by Congress, one an amendment to the 1935 act, and the other a substitute for the Railroad Tax Act, the expiration of which was extended to the end of the fiscal year 1938.

The new retirement plan covers approximately 1,500,000 employees of railroads, express companies, sleeping-car companies, and their subsidiaries, and also includes employees of railroad associations and of railroad labor organizations. It provides for voluntary retirement at age 65, or at age 60 after 30 years' service, but with a reduction in the annuity, in the latter case, of one-fifteenth for each year under 65. There is no compulsory retirement age under the plan, but after July 1, 1937, no credit will be given for any service after age 65, though taxes will continue for such additional years. Provision is made for retirement in case of physical or mental total disability, after 30 years' service, with full annuity privileges.

[1] Statement by George M. Harrison, chairman of the Railway Labor Executives Association, and J. J. Pelley, president of the Association of American Railroads, dated Mar. 16, 1937.

[2] An analysis of this law was given in the October 1935 Monthly Labor Review (p. 923).

[3] See August 1936 Monthly Labor Review (p. 328) for a synopsis of this decision.

The amount of the annuity payable under the proposed plan is computed by the same method as provided in the 1935 act, viz, by multiplying the years of service up to 30 by a specified percentage of the average monthly compensation up to $300, for service after January 1, 1937, or of the average compensation in the period 1924 to 1931, or equivalent basis, for service prior to January 1, 1937. The percentages are as follows: 2 percent on the first $50, 1½ percent on the next $100, and 1 percent on the amount over $150 up to $300. A minimum annuity is provided for employees with at least 20 years' service, based on a graduated scale of percentages of the monthly compensation. Such annuity, however, shall not be less than would be payable under the Social Security Act.

An optional joint and survivor annuity is provided for, and also death benefits amounting to 4 percent of any month's earnings up to $300 after December 31, 1936, payable to the heirs or estate of a deceased employee with service after that date. All annuities are to be paid out of the United States Treasury. No annuity will be paid to any employee who retires and then engages in "regular gainful employment" in some other line of work.

As in the 1935 act, the plan provides for administration by a board of three members to be appointed by the President, one of the members to be nominated by the employees, another by the employers, and the third to be a disinterested person. The members of the board are to hold office for 5 years and to be paid a salary of $10,000 per year.

The new plan provides for an income tax on the wages of the employees after December 31, 1936, and an excise tax on the employers payable on the amounts paid to employees after that date, both taxes being on the following basis: 2½ percent for 1937, 1938, and 1939; 2¾, 3, and 3¼ percent, respectively, for each succeeding 3 years; and 3½ percent after December 31, 1948. In both instances, anything over $300 per month is excluded in the calculation of the tax.

Under the agreement there would be returned to the railway employees all money held by the railroads as deductions from wages prior to January 1, 1937, and the money set aside by the railroads for payment of their excise taxes under the 1935 tax act would be abated. Of the amounts set aside subsequent to that date the railroads would pay into the Treasury their 2½-percent excise tax and 2½ percent of the pay roll and return 1 percent of the latter to the employees.

It was also agreed that pending litigation involving the validity of the Railroad Employees' Retirement Act and the Railroad Tax Act shall, subject to the approval of the Attorney General, be settled in accordance with the purposes of the agreement.

Social Insurance for Germans Resident Abroad

THE terms under which Germans living abroad may participate in the social-insurance benefits, provided for wage earners and salaried employees by German law, have been liberalized under legislation enacted in December 1936.[1] Hitherto only those nationals who insured prior to their departure from Germany retained such coverage. The new legislation permits German nationals under 40 years old, either temporarily or permanently domiciled abroad, to participate in the insurance system corresponding to their occupation, that is, the general invalidity, old-age, and survivors' insurance established for workers, or one of the special pension plans set up for salaried employees and miners, respectively. The amount of insurance subscribed for is not dependent upon the level of income. As application of the terms of the sickness-insurance system would be impracticable abroad, coverage of this kind is not provided.

Eligibility is extended not only to wage earners and salaried employees, but also to independent workers. To identify in which classification the insured might fall would be extremely difficult. Therefore the person seeking coverage exercises the right of choice as to the plan under which he will insure.

Liberalization of Unemployment Benefits in Great Britain[2]

AFTER April 1, 1937, insurance benefits will accrue to unemployed insured workers in Great Britain after 3 days of continuous unemployment, instead of after the sixth day, as has been the condition heretofore. This liberalization is made possible because of a large surplus in the unemployment-insurance fund resulting from increased employment and decreased unemployment.

The Unemployment Insurance Statutory Committee is a continuing body required by the Unemployment Insurance Act to review periodically the operation of the act and the financial condition of the fund, and to make recommendations for the administration of the unemployment-insurance system. Reporting on February 22, 1937, this committee found that for 2 successive years the fund had accumulated a surplus considerably in excess of estimates and that in February 1937 the available surplus was £17,600,000.[3] The committee

[1] Germany, Reichs- und Preussisches Arbeitsministerium, Amtliche Nachrichten für Reichsversicherung (Berlin), Heft Nr. 1, 1937, pp. IV 2-3; International Labor Office, Industrial and Labor Information (Geneva), Mar. 1, 1937, pp. 276-277.

[2] From reports of Alfred Nutting, American Consulate General, London, Feb. 23, 1937, and Ray Atherton, Counselor, American Embassy, London, Mar. 1, 1937.

[3] Average exchange rate of English pound in February 1937=$4.89.

made two recommendations, which the Government accepted and put into practice, that will call for the expenditure of £17,250,000 of this surplus over a period of 8 years.

The first of these recommendations was to shorten from 6 to 3 days the time that must elapse before an unemployed insured worker becomes eligible to out-of-work benefit. The regulatory order issued by the Ministry of Labor made this provision effective as of April 1.

The second provision was made retroactive to January 1, 1937. Its effect is to increase the number of days of additional benefit payable after the expiration of the 26-week statutory limitation, for persons who have been regularly employed during the past 5 years. Thus, after an insured worker has been out of work and has drawn unemployment benefits for the full 26 weeks, he will be eligible to receive 3 additional days' benefit for each 5 contributions that he has made to the fund during the past 5 years, minus 1 day for each 8 days during which he has been unemployed and has received benefit payments. Previously this charge against the amount of compensated unemployment was based on 5 days' payment. In other words, the number of days' unemployment benefit to which an insured worker who has been regularly employed for 5 years may, by reason of his contributions, be entitled, over and above the statutory 26 weeks in any insurable year, will be conditioned upon 8 days' compensated unemployment instead of on 5 days', as had been the prevailing basis.

Old-Age Pension Law of Norway, 1936

OLD-AGE pensions are provided for all citizens of Norway on reaching the age of 70, under a law passed in July 1936.[1] All persons with annual incomes of 800 kroner [2] or over if they are living in the city, or 600 kroner if living in the country, will be required to contribute 1 percent of their incomes. The State and the communes also are to contribute to the cost of the pensions.

This law supersedes a noncontributory law passed in 1923 but never put into operation. Meanwhile, over 100 noncontributory local pension systems have been put into operation by municipalities for their inhabitants, the total covered thereby comprising about 40 percent of the total population of Norway.

Coverage of System

AFTER July 1, 1937, under the new law, all Norwegian citizens will be entitled to pensions who have reached the age of 70 years, and who,

[1] Data are from report by Jefferson Patterson, chargé d'affaires ad interim, American Legation at Oslo, dated Oct. 24, 1936; and International Labor Office, Industrial and Labor Information (Geneva), July 27, 1936, p. 117.

[2] Average exchange rate of krone in January 1937=24.66 cents.

for at least half of the period since their sixteenth year and for at least 5 years preceding, have resided continuously in the kingdom; or have sailed with Norwegian vessels; or have been employees of the Norwegian Government abroad or paid workers of such employees; or have been permanent employees of an industry with headquarters in Norway; or, as the spouse, child, or servant, have belonged to the household of such an employee. Married couples will be entitled to pensions if one member thereof fulfills the requirements therefor.

The following will be ineligible for pensions: Persons who under the provisions of the penal law have been deprived of their civil rights and have not regained them; persons who, during the 5 years immediately preceding the application for pension, have been sentenced to or served a prison term or performed compulsory labor for vagrancy, begging, drunkenness, or failure to support their families. If a person is declared ineligible, the pension otherwise payable to him may, if necessary, be paid to his family.

Contributions

AN OLD-AGE tax of 1 percent annually of a person's estimated income is to be paid from the year in which he becomes 18 years old until the year in which he becomes 70 years old or dies. Incomes under 800 kroner in the city and 600 kroner in the country are exempt from the tax. The maximum tax collectible is 100 kroner. Domestic corporations and other taxable companies and institutions are also subject to this tax under the same conditions. The first assessment of the tax will be in 1937, for the 1936 income.

The old-age tax is to be collected by the communes and paid into a State old-age fund. Pensions and funeral expenses are to be paid by the commune of residence of the insured person. Half of such total expenditures will be returned in contributions from the State treasury and three-eighths from the old-age fund. The contribution toward old-age pensions, however, will be limited to the portions mentioned of the pensions which remain beyond the minimum pension basis, hereafter referred to.

Benefits

A PENSION basis is to be fixed for each commune. Such pension basis is to be a sum sufficiently large that 60 percent thereof will supply a single person for 1 year with the necessaries of life in the commune in which he resides. The minimum pension basis for a single person will be 800 kroner in cities and 600 kroner in the country. For married couples the pension basis will be at least 50 percent higher than that for single persons. For persons having children, the pension basis must be large enough so that 60 percent thereof will supply the entire family, when it has no other income, with the necessaries of life.

The pension basis is to be fixed by the Ministry of Social Affairs on recommendation of the communal council. Appeal therefrom may be taken to the King.

The old-age pension is payable at age 70, and amounts to 60 percent of the sum necessary to bring the pensioner's income up to the pension basis. In the case of a pensioner with a family, the corresponding pension basis and the estimated income of the whole family will be taken into account. Gifts and contributions of a value not to exceed the lowest pension basis, and other income up to one-third of the pension basis, are not included in the calculation of the income.

Funeral expenses up to 75 kroner will be paid on the death of a pensioner or a member of his family. Deduction will be made, however, of payments for funeral expenses made by any other public fund or sickness insurance.

Administration

THE old-age pension system is to be administered by the Ministry of Social Affairs (Pension Commission). Local pension boards, composed of five members and five substitutes, are to be set up in each commune or municipality. These communal boards will assess and collect the old-age tax, receive and pass upon applications for old-age pensions, make pension payments, either monthly or quarterly, and carry out the provisions of the law and the instructions of the Pension Commission.

In case of question as to the commune of residence or the jurisdiction of the communal board, the Pension Commission may either consider the pension application itself or delegate the hearing and decision thereof to a communal board. Funds for the expenses of the communal boards are to be appropriated by the communal council.

Administration of the old-age tax fund is to be governed by regulations prescribed by the King. A plan for the growth of the fund and its ultimate size and administration will be established by the King, on approval by the Storting. When the expenditures for old-age pensions and funeral expenses reach the amount fixed by the plan, the interest accruing from the fund will be used for additional expenditures for old-age pensions under the plan. At least once in every 10 years an expert study is to be made of population conditions and the economic status of the pension system, to the end that possible necessary revisions may be considered.

INTERNATIONAL LABOR RELATIONS

The World Textile Conference

THE World Textile Conference held in Washington from April 2 to April 17, 1937, by the International Labor Organization was attended by representatives of 26 nations. Every important textile-producing country except Italy was represented. Fifteen nations sent tripartite delegations consisting of representatives of employers, workers, and governments. Four countries, Germany, Rumania, Turkey, and the U. S. S. R. sent nonvoting observers, while six sent only government delegates.

The conference was a new experiment by the International Labor Organization in world cooperation toward the solution of economic difficulties that oppress labor. At a previous International Labor Conference a draft convention for the 40-hour week in the textile industry had been debated but action upon it had been postponed. It appeared to careful observers that a successful agreement upon any draft limiting hours of work in that industry would be dependent upon a much more careful survey of the economic problems of the industry than had as yet been undertaken.

The conference in Washington was therefore more than a preparation for a later discussion in Geneva of a draft convention specifying the 40-hour week for textile workers, for it was hoped that out of the general discussion might come fruitful suggestions for additional lines of international agreement leading toward stabilization of the industry.

The conference discussion was based upon an elaborate and careful study of the industry made by the International Labor Office, entitled, "The World Textile Industry." Following an extensive but general survey of the field the conference set up three committees dealing with statistics, economic problems, and social problems.

In its report, the committee on statistics recommended a series of improvements in a questionnaire which might be used for securing world-wide statistics on the textile industry. The committee urged the desirability of proceeding with the inquiry at an early date. While the questionnaire was designed for the purpose of a comprehensive survey at intervals of not more than 5 years, the committee agreed that more current information was needed. Accordingly it recommended that, at intervals of not more than 3 months, each participating country should collect from a representative sample of

textile establishments data on (*a*) total employment, (*b*) total wage payments, and (*c*) man-hours worked per pay period. The committee also recommended the collection of better data on the following subjects: Value of production, cost and standards of living, and employment and unemployment in the textile industry.

The report of the economic committee summarized the debate upon a long list of problems and endorsed the following suggestions:

1. That, in framing their commercial policies, governments should take account of social conditions prevailing in countries with which they have trade relations, and in particular should bear in mind the standards set by international labor conventions.
2. That, in the interests of enlarged trade as well as of improved social conditions, governments should seek every opportunity to reduce unreasonable trade barriers.
3. That an international tripartite committee might be set up within the International Labor Organization to study measures necessary to achieve prosperity and social justice in the textile industry, or more generally to consider all the economic and social problems of the textile industry.
4. That the efforts now being made to coordinate the interests of producers and consumers of textile raw materials should be further pursued and further implemented, with particular emphasis raising the suitability and accessibility of raw materials for the technical and economic requirements of the industry in order to improve efficiency and lower costs.
5. That governments might contemplate the establishment of an international commission to consider production and prices in the textile industry as a whole. In this connection it was said that greater balance in the world textile industry involves to a certain degree industrial planning on an international scale.
6. That minimum wage-fixing machinery and trade boards be established in countries where they do not exist to regulate wages and working conditions.

Repeated references to the desirability of increased consumption of textile products were based not only upon the need for fuller utilization of existing equipment and for increased employment but on the fundamental inadequacy of purchasing power in the hands of the lower income groups many of whom suffer an actual lack of sufficient clothing. The results shown by United States Bureau of Labor Statistics' studies in family expenditures were cited in support of this view. Emphasis was placed on the necessity of increasing national purchasing power and raising standards of living.

The conference unanimously accepted the conclusions of the report to the effect that "the large consensus of opinion expressed in favor of international action being taken with a view to overcoming these obstacles through diminishing the economic difficulties which are at present hampering the industry suggests the necessity for the continuous consideration of the problems of the industry and the desirability of creating the necessary instruments for that purpose."

The committee on social problems concluded its discussions with the following suggestions:

1. Voluntary organization of employers and workers in the textile industry for the purpose of effecting collective agreements should be encouraged.

2. Collective agreements may not always afford adequate safeguards. National legislation and application of international conventions may, therefore, be more effective.

3. Special restrictive regulations regarding shift working should be considered.

4. Night work by women and children should be absolutely prohibited.

5. Governments should give special consideration to the early ratification of the conventions on weekly rest and annual vacations with pay.

6. Work assignments should be carefully adjusted to changes in the intensity of effort requested for the worker.

7. The International Labor Office should make generally available the results of studies of problems of fatigue, health, and accident prevention in the textile industry.

8. Urges ratifications of the convention setting minimum age for the admission of young persons to employment.

9. The International Labor Office should renew its efforts to bring about a solution of the problem of regulating labor conditions in the International Settlements in China.

On the 40-hour week, its conclusion was limited to the observation that the discussion had "served to throw light upon the problems arising in connection with the reduction of hours of work in the textile industry, the practicability of and the necessity for which were urged by all the workers' representatives and by certain government and employers' representatives. * * * It will be for the International Labor Conference which will meet in June next to come to a decision upon the question of the adoption of a draft convention on this subject."

Because of its preliminary nature the only action of the conference was the unanimous adoption of the committee reports summarizing the debates and expressing, where possible, the prevailing view. Such committee reports, however, forecast the progress that is likely to follow from the conference. There can be no question but that in June at Geneva the proposal of a 40-hour week convention in the textile industry will be debated with much greater clarity because of the extensive discussion of the problem in Washington. In some respects the draft convention debated last year is now shown to be inadequate and modifications may be expected. It is probable also that the Governing Body of the International Labor Organization will begin the collection in the near future of the statistical information on hours and wages recommended by the conference.

The development of a long range continuous program of study and action by the International Labor Office and other agencies to deal with the problems of the industry have been stimulated by the Washington discussions. It is possible that a study of comparative costs of production will be undertaken in the future. So also discussions looking toward international understandings on the control of production and of prices and upon the quality and availability of raw materials are possible.

Several conference delegates urged the desirability of relating tariff programs to the labor standards of competing nations. They suggested that although this policy could be applied in such a way as to support high tariffs it also ought to be applied by making tariff reductions contingent upon an improvement in the working conditions of the employees of affected countries.

LABOR INVOLVED IN INDUSTRIAL PRODUCTION

Labor Requirements in Lumber Production [1]

By Bernard H. Topkis, of the Bureau of Labor Statistics

IN THE determination of the work-creating potentialities of a construction project, whether financed from public or private funds, the man-hours of labor at the site are readily ascertained from the pay rolls of the contractors on the job. Direct labor, however, is only a part of the employment created by the expenditure of public funds for construction projects. Before carpenters can be employed on a construction project, certain basic materials must be at the site. To provide this material, many wage earners must previously have been employed in the forests, sawmills, and transportation companies. The manufacture of such material creates a large amount of indirect employment, perhaps thousands of miles away from the actual construction project. In the past no reliable criteria have been available for measuring this indirect employment. To secure such information, the Bureau of Labor Statistics has undertaken a series of studies of the man-hours of employment involved in the production of certain basic construction materials. The present study, the third in the series,[2] analyzes the labor requirements in the production and distribution of lumber and lumber products and was made in cooperation with the National Lumber Manufacturers Association, the National Oak Flooring Manufacturers Association, the Douglas Fir Plywood Association, and the Millwork Cost Bureau.

Summary of Findings

As a result of this study, it is possible to estimate more accurately the labor involved in lumber production. For every thousand board feet of timbers at the construction site, 25.4 man-hours of employment were required in production and transportation processes; for every thousand board feet of yard lumber, 28.1 man-hours; and for every thousand feet of planing-mill lumber, 32.7 man-hours. Every thousand square feet of cedar shingle roof created 38.0 man-hours of employment away from the site. Every thousand square feet of floor space covered with 13/16 inch oak hardwood flooring created 83.0 man-hours of indirect labor. Each thousand square feet of ceilings and walls

[1] Prepared in the Division of Construction and Public Employment, Herman B. Byer, chief.

[2] The first article covering the labor requirements in the steel industry was published in the May 1935 issue of the Monthly Labor Review. The March 1936 issue carried the second article, a discussion of the man-hours of labor required in cement production.

of Douglas fir plywood created 24.5 man-hours of indirect work. For every hundred Douglas fir interior doors used, 156.0 man-hours of indirect labor were needed, and for every thousand laths used, 7.6 man-hours.

Applying these figures to the construction projects of the Public Works Administration, it is estimated that from July 1933 through December 1936, 90,000,000 man-hours were created in the production and distribution of the lumber and lumber products ordered.

Production Processes and Methods

FELLING, one of the first steps, is done by hand with the use of axes and saws. The felled trees are cut into long lengths, either by hand or by power drag saws. In a few localities the logs are hauled to nearby rivers and floated to the sawmills. Usually, however, the logs are hauled on specially constructed cars over logging railroads. In recent years logs have also been moved increasingly by truck.

Several lumber products are manufactured directly from the logs, in independent plants. In the production of shingles the logs are transported to a mill and cut into bolts and the bolts are run through special shingle saws. The shingles are packed in bundles of about 200 pieces and are marketed by the thousand or, more commonly, by the square. A square contains approximately 800 shingles, which will cover 100 square feet of surface area.

Douglas fir plywood is also manufactured in independent plants. The usual procedure consists of cooking 8-foot lengths of Douglas fir logs in steam vats until the wood is soft and pliable. After the bark has been removed the logs are revolved against a keen-edged knife and peeled into thin sheets one-tenth to one-eighth of an inch thick. The sheets are clipped into desired sizes and dried. Several sheets are then glued together, in such manner that the grain of each sheet is at right angles to that of the next, and pressed. A common form of plywood is made by gluing thin sheets upon both sides of a thicker sheet or core. Virtually the same processes are used for the manufacture of plywood made of hardwood.

Logs intended for manufacture into timbers, yard lumber, and planing-mill lumber are dumped into mill ponds on reaching the sawmills. The water keeps the logs in good condition for the saws, and assures more uniform seasoning and ease in handling. A few of the smaller sawmills are equipped with only a single circular saw, but the larger mills have band saws with gang saws, resaws, edgers, trimmers, and other devices. Some of the lumber products which come from the head saw are known in the trade as timbers and yard lumber.

Lumber as it leaves the sawmill is green and must usually be seasoned before marketing. Seasoning increases the strength, stiff-

ness, hardness, and decay-resisting qualities, and, at the same time, reduces the weight and renders the lumber less liable to shrinkage. Two drying methods are in general use throughout the industry. Under the method of drying by air, the lumber is piled in a storage yard in such a way that each piece has adequate ventilation and opportunity to dry. Soft woods usually require 40 to 70 days for air drying; hard woods average 180 days. The kiln method of drying subjects the lumber to regulated changes of heat and moisture which are scientifically determined according to the nature of the wood and its thickness.

In sawmill operations approximately 40 percent of the log is waste material, but as much as 80 percent of the waste is sometimes salvaged. Lath, a byproduct of the sawmill, is manufactured from slabs and small pieces of wood and waste material having little or no other commercial value. The net waste often is less than 10 percent of the log, except in the cutting of small logs when the waste is much higher, and is frequently used as fuel in the boilers to generate steam. Sawdust and hog-fuel are being used increasingly in heating commercial buildings and private homes in communities where supplies are available. "Hogged" chips from sawmills also enter into the production of sulphite pulp.

Lumber which is to be surfaced or "dressed", or further refined, goes to the planing mill. The modern planing mill is equipped with high-speed power machines of various types for turning out smooth-surfaced or worked lumber. The planing mill produces four distinct types of products: (1) Surfaced lumber which, as its name implies, is lumber finished on one or more sides; (2) matched lumber, in which the projecting rib on one edge of a board fits into a corresponding recess cut at the edge of another board, forming what is known in the trade as a tongue-and-groove joint; (3) shiplap, which is made with a different joint, portions of the width being cut away from both edges to form a tightly overlapping joint, giving a continuous surface; and (4) patterned lumber, i. e., worked lumber which has been shaped to a pattern or mold.

Millwork products, such as sash, doors, frames, molding, and blinds, are manufactured from planing-mill lumber, and in some instances from surfaced or rough lumber, generally in independent plants. After further seasoning, the stock is cut and ripped into suitable sizes. The pieces are delivered to the manufacturing department, and the millworkers finish and assemble the pieces into various finished millwork products.

Hardwood flooring is manufactured in mills operating independently of or in conjunction with sawmills. Air-dried oak boards are shipped from the sawmills to the flooring factories. There the boards are seasoned and cut into the desired widths. Tongue-and-groove joints

are cut in the sides and usually the ends of the pieces, and the pieces are then graded and bundled for distribution.

Scope and Method of Bureau's Study

THE operations described above apply generally to all the forest regions of the United States. The details, however, vary considerably with each region, depending on the species (or mixture of species) of trees handled, the topography of the land, and the type of equipment used. The 495,000,000 acres of forest are divided into three major belts. The first belt extends over virtually the whole area between the Atlantic Ocean and the Great Plains and includes the northeastern, southern pine, Appalachian hardwood, Great Lakes, and southern hardwood regions. The second belt runs along the Rocky Mountains from Canada to Mexico and includes parts of the western pine region. The third belt, extending from the Sierra and Cascade Mountains to the Pacific Ocean, includes the Douglas fir, western hemlock, and cedar region, the redwood region of northwestern California, and the western pine region of the east side of the Cascades and the Siskiyou Sierras.

Timbers, yard lumber, and planing-mill lumber.—To measure the amount of labor required to turn out the timbers, yard lumber, and planing-mill lumber used by the Federal public works program, a survey was made of 83 mills representative of the three producing areas and of the prevailing species and lumber products. The saw and planing mills included in the study were recommended by the National Lumber Manufacturers Association. Of the 83 mills, 28 were located in the southern pine region; 25 in the western pine area; 16 in the Douglas fir, western hemlock, and cedar area; 2 in the redwood region; and 12 in the southern hardwood region. In 1935 these 83 mills produced approximately 2,377,000,000 board feet[3] of lumber, or 12 percent of the estimated total production of the country in that year.

The sample studied in the southern pine region included 12 large sawmills[4] in Louisiana, Texas, Arkansas, and Mississippi, 10 small mills in Tennessee and Georgia, and 6 concentration plants operated in connection with portable sawmills in Mississippi. Three groups of mills were sampled in the western pine region. Ponderosa pine was the predominant lumber produced in 15 of these mills, Idaho white pine in 5 mills, and sugar pine in 5 mills. The mills producing ponderosa pine were located in northern California, Idaho, Oregon, central Washington, Arizona, and New Mexico; the mills producing Idaho white pine were in eastern Washington, northern Idaho, and Montana; and those producing sugar pine were in California. The

[3] A board foot is a unit of lumber measurement, based on the nominal dimensions of rough green lumber, 1 foot long, 1 foot wide, and 1 inch thick, or the equivalent.

[4] A large mill is any mil lwith a production capacity of more than 500,000 board feet per month.

mills of the Douglas fir, western hemlock, and cedar region were located on the coastal plains of Washington and Oregon and included 2 lumber mills shipping their product entirely by rail, 3 mills shipping by cargo, and 11 mills shipping by both rail and cargo. The plants in the southern hardwood region included 6 located in the southern Appalachian Mountains and 6 in the lower Mississippi Valley.

In determining the man-hours involved in producing timbers, yard lumber, and planing-mill lumber, an analysis was made of the processes of production.

To determine the number of man-hours required to log timber sufficient to produce 1,000 board feet of lumber, the total man-hours involved in felling the trees, sawing them into merchantable lengths, delivering them to a loading place, and hauling the logs by rail, truck, or raft to the sawmill were computed from pay-roll records and operating statements of the logging camps. Miscellaneous labor, such as for supervision and maintenance, was also included in the total number of man-hours required for logging. The total man-hours for 1935 for the various departments were divided by the annual production to obtain the man-hours per thousand feet log measure.[5]

In the manufacturing processes many different sizes, grades, and shapes are produced from the same log, but can be classified into three general groups—timbers, yard lumber, and planing-mill lumber. The preliminary process of sawing the logs into desired sizes and shapes is the same for the three types of lumber. The number of man-hours per thousand board feet required in the sawmill department was determined by dividing the total number of man-hours of labor in the sawmill department by the total number of board feet cut by the head saw in 1935. The man-hours per thousand board feet represent an average of all sizes of lumber produced by the mill.

After the lumber leaves the sawmill, it is sorted and handled according to the use for which it is intended. In addition to the labor required in the sawmill, the man-hours of labor required to manufacture timbers consist of the total labor involved in sending the large timbers to a separate loading platform, in cutting into desired lengths, and in shipping. The labor time required to produce a thousand board feet of lumber includes, for yard lumber, the labor required in air seasoning, handling, dressing, and shipping; and for planing-mill lumber, the labor required in kiln drying, handling, planing, and shipping. The man-hours for these operations have been divided by the footage passing through each department to determine the man-hours required

[5] Logs are measured in board feet, log measure, a measure of the lumber contents of the log, based on log length and diameter and subject to reductions for visible defects. Lumber, on the other hand, is measured in board feet. To express log measure in board feet the following method was used: The logs were measured before sawing. The lumber was measured after leaving the head saw. The ratio of the lumber out-turn from the log was determined and applied to the man-hours per thousand log measure to obtain the man-hours per thousand board feet.

per thousand board feet. The man-hours for such miscellaneous labor as supervision, clerical work, and general overhead were obtained by dividing the total man-hours expended in this type of work by the total footage cut by the head saw. Allowance was made for the waste in manufacturing and handling. Then the man-hours, per thousand board feet, required for each operation entering into the manufacture of the three types of lumber were added to obtain the total man-hours required to manufacture 1,000 board feet of timbers, yard lumber, or planing-mill lumber.

Plywood and shingles.—Since plywood is also manufactured directly from the log, six representative mills producing Douglas fir plywood were studied. These mills were selected for study upon the recommendation of the Douglas Fir Plywood Association. In 1935 these mills produced approximately 200,000,000 square feet of plywood, or 40 percent of the total production of the United States in that year. The man-hours required for manufacturing cedar shingles were determined from a study of the records of eight sawmills which also manufactured cedar shingles. Approximately 500,000 squares of shingles were produced by these mills in 1935, or about 10 percent of the total production of the United States. The man-hours required to manufacture a square of shingles were computed from the records of the mills by dividing the total number of man-hours worked by the number of units produced.

Millwork.—The labor involved in producing millwork and hardwood flooring consists of that required in the production of the raw material, its transportation to the planing mill, the final manufacturing process, selling and administration, and transportation to the site of construction. Since there are many kinds of millwork and many sizes of each kind, certain products were selected for study on the basis of the frequency with which they appeared in the market.

The man-hours involved in the manufacture of millwork were determined from an analysis of the pay rolls and cost records of 15 representative stock-millwork factories located on the Pacific coast and in the upper Mississippi Valley, and 8 special-millwork factories located in the Middle West and Southeast. The labor requirements for the manufacture of hardwood flooring were determined by a study of five representative oak-flooring mills in western Tennessee, which produced approximately 20 percent of all oak flooring manufactured in the United States in 1935.

Surfaced boards are used to a large extent in the production of millwork. Since a certain amount of waste results from the processes of manufacture, more board feet of lumber are utilized than appear in the finished product. Allowing for this waste, the amount of lumber required to manufacture a unit of millwork was determined from the records of the mills. Transportation from the sawmill to the planing

mill was estimated on the basis of freight costs per thousand board feet, as shown by the records of the millwork factories. Man-hours for handling, seasoning, and cutting the lumber at the planing mill were determined from the records of the mills and added to the labor required in the production of the lumber and in transportation to the planing mill. The total man-hours involved in the production of 1,000 board feet of raw material used in manufacturing were divided by the number of board feet required to manufacture a unit of millwork.

The labor required in each step in the manufacture of millwork was combined to obtain the total number of man-hours required for manufacturing millwork products in 1935. To determine the man-hours required to manufacture a unit of millwork the total man-hours required to manufacture the product were divided by the quantity of each millwork product manufactured.

An estimate was also made of the man-hours required for selling and administration. For timbers, yard lumber, and planing-mill lumber this estimate was based on the assumption that each employee engaged in selling and administrative occupations worked 2,000 hours in 1935.[6] To determine the man-hours per thousand board feet the total number of hours worked during the year in each mill by all workers engaged in selling and administrative occupations was divided by the total footage sales of each mill in 1935. The basic data were obtained from firms employing a full selling staff and selling directly to retail dealers or large consumers.

The man-hours required for selling and administration of lath, shingles, plywood, and millwork were determined in a manner similar to that of lumber. In those millwork establishments which manufactured a variety of items the total man-hours worked in 1935 in these departments were prorated among the various items of millwork according to the value of each item manufactured. These man-hours were divided by the number of units sold for the year.

Since a large percentage of the lumber and millwork is consumed in nonproducing areas, transportation is an important factor in the industry. These products for the most part are moved to the market either by water or rail. The man-hours for transportation are considered as the number required to move the lumber and millwork to a terminal, with an additional allowance for trucking to the site of construction. The number of man-hours of labor required to move 1,000 board feet of lumber by rail was obtained by dividing one-half of the freight cost of lumber shipments by the average hourly wage rate paid by the railroad companies.[7] The estimate of the labor required for transporting lumber by water is based on a study of

[6] Estimated on the basis of 50 workweeks of 40 hours each per year.

[7] Statistics compiled by the Interstate Commerce Commission and the Bureau of Railway Economics indicate that in years of normal business activity approximately 50 percent of the operating revenue is in the form of wages and salaries. The average hourly wage rate paid in 1935 was $0.686.

stevedore operations and cargo shipping. Millwork transportation labor was estimated on the basis of rail freight costs plus the labor involved in trucking from the freight terminal to the site of construction. Estimates of trucking labor were based on observations of the man-hours required for transporting lumber and millwork by truck from the rail terminal or from the dock to the site of construction. Inasmuch as the labor involved in transportation is at best an estimate, no attempt has been made to differentiate the shipping man-hours for timbers, yard lumber, and planing-mill lumber.

Labor Required in Production and Distribution of Timbers, Yard Lumber, and Planing-Mill Lumber

THE principal operations involved in the production and distribution of timbers, yard lumber, and planing-mill lumber are (1) logging, (2) manufacturing, and (3) selling and administration, and (4) transportation.

Logging

The time required to fell a thousand board feet, log measure, depends on the amount of waste encountered and the size of the tree. In many forest areas as many as 20 to 50 percent of the trees are undersized and defective. After the tree is felled, the trunk is sawed into merchantable lengths. Felling and bucking in all regions averaged 1.5 man-hours per thousand board feet (table 1). This ranged from 1.1 man-hours in the western pine and Douglas fir, western hemlock, and cedar regions to 2.7 man-hours in the southern hardwood region. The greater time required in the southern hardwood region was accounted for by the smaller size of the trees, the nature of the wood, and the average skill of the workers.

Table 1.—Man-Hours Required in Logging 1,000 Feet of Lumber in Specified Regions

Department	All regions		Southern pine region		Western pine region		Douglas fir, western hemlock, and cedar region		Redwood region		Southern hardwood region	
	Log scale	Board feet	Log scale	Board feet	Log scale	Board feet	Log scale	Board feet	Log scale	Board feet	Log scale	Board feet
All departments	9.4	8.1	11.2	9.9	7.4	6.6	6.2	4.9	8.5	7.8	15.1	13.6
Felling and bucking	1.7	1.5	1.8	1.6	1.2	1.1	1.4	1.1	2.2	2.0	3.0	2.7
Yarding and handling	2.8	2.4	3.3	2.9	2.3	2.1	1.9	1.5	2.2	2.0	4.3	3.9
Transportation	4.0	3.4	5.4	4.8	2.5	2.2	2.1	1.7	3.1	2.9	6.4	5.7
Miscellaneous	.9	.8	.7	.6	1.4	1.2	.8	.6	1.0	.9	1.4	1.3

Yarding and handling, i. e., moving the logs from the forest to a central point from which they were shipped by train or truck to the sawmill, required 2.4 man-hours. The labor requirement for this process was highest in the southern hardwood region—3.9 man-hours.

In the Douglas fir, western hemlock, and cedar region 1.5 man-hours were required for yarding and handling.

Rail, water, or truck are used to transport the logs to the sawmill. An average of 3.4 man-hours was required for this department.

Since logging camps are located near the forests and far from settled communities, food, lodging, and recreation are provided for the men. The labor involved in providing these facilities and the man-hours required of timekeepers, superintendents, foremen, and maintenance men accounted for 0.8 man-hour per thousand board feet. This item is included in table 1 under "miscellaneous."

Manufacturing

In sawmilling operations the logs are drawn from the water on a cable or chain, measured and bucked into lumber lengths, and sent to the head saw. Usually the mills are equipped with band saws, and the logs are placed on carriages and moved back and forth against the revolving band saws. The sawyers turn the logs in such a way that the maximum amount of clear high-grade lumber is cut from the logs.

The man-hours of labor required in the sawmill showed considerable variation among the different regions, but did not vary for the types of lumber produced. In the conversion of green lumber into planing-mill lumber there is a loss of approximately 10 percent, and the man-hours chargeable to the sawmill department for planing-mill lumber had, therefore, to be increased by this amount. An average of 4.3 man-hours was required per thousand board feet, for timbers and yard lumber, and 4.7 for planing-mill lumber (table 2). The man-hours ranged from 2.5 in the western pine region to 6.6 man-hours in the southern hardwood area for timbers and yard lumber, and from 2.8 in the western pine region to 7.3 in the southern hardwood area for planing-mill lumber.

Edging, trimming, and gang-saw operations are included in the sawmill labor. Timbers which are produced in relatively small quantities in the western pine and redwood regions are not trimmed in the sawmill, but are delivered to a timber dock.

The moisture content of freshly cut lumber adds from 25 to 225 percent to the weight of the dry log. Before the lumber can be used, much of this excess moisture must be removed by a process called seasoning. The rough green lumber is graded and air or kiln dried after it leaves the saw. Seasoning and handling, as this operation is known, required 2.3 man-hours per thousand board feet for timbers, 3.2 man-hours for yard lumber, and 3.7 man-hours for planing-mill lumber. The man-hours required for seasoning and handling timbers ranged from 0.7 in the Douglas fir, western hemlock, and cedar region to 4.0 in the southern hardwood area. Seasoning and handling yard lumber required 1.3 and 6.6 man-hours respectively

in the Douglas fir, western hemlock, and cedar region, and the redwood region. Planing-mill lumber in the western pine region required 2.1 man-hours for seasoning and handling a thousand board feet. In the southern hardwood region 6.1 man-hours were required. These figures include an allowance of 10 percent to cover the waste in the finishing department of the planing mill.

Ordinarily timbers, which are intended for construction work, are not surfaced. A sizing operation may be necessary to insure accurate dimensions. The manufacturing operation for yard lumber and planing-mill lumber, however, includes a finishing process. The rough lumber is usually put through a surfacing machine, loaded on a tram, and carried to a loading platform. The labor required for finishing a thousand board feet of yard lumber is much less than that required for planing-mill lumber—1.1 man-hours as compared with 3.4 man-hours, in the plants studied.

The man-hours of labor required to ship a thousand board feet of timbers ranged from 0.4 in the Douglas fir, western hemlock, and cedar region to 3.2 in the southern hardwood area, averaging 0.9 in all regions. For yard lumber the average for all regions was 1.6 man-hours and for planing-mill lumber 2.2 man-hours. In the Douglas fir, western hemlock, and cedar region, 1.4 man-hours were required; and in the southern hardwood area, 3.8 hours.

Table 2.—Man-Hours Required in Manufacturing 1,000 Board Feet of Timbers, Yard Lumber, and Planing-Mill Lumber in Specified Regions

Department	All regions	Southern pine region	Western pine region	Douglas fir, western hemlock, and cedar region	Redwood region	Southern hardwood region
	Timbers					
All departments	7.8	8.4	(1)	4.3	(1)	14.2
Sawmill	4.3	[2] 4.4	(1)	2.9	(1)	6.6
Seasoning and handling	2.3	2.8	(1)	.7	(1)	4.0
Shipping	.9	.9	(1)	.4	(1)	3.2
Miscellaneous	.3	.3	(1)	.3	(1)	.4
	Yard lumber					
All departments	10.5	13.0	7.6	6.5	13.8	16.3
Sawmill	4.3	5.4	2.5	2.9	3.1	6.6
Seasoning and handling	3.2	4.4	2.1	1.3	6.6	5.8
Finishing	1.1	1.0	1.0	1.0	1.9	1.5
Shipping	1.6	1.8	1.8	1.0	1.8	2.0
Miscellaneous	.3	.4	.2	.3	.4	.4
	Planing-mill lumber					
All departments [3]	14.3	17.8	9.1	10.5	16.1	20.6
Sawmill [3]	4.7	5.9	2.8	3.2	3.4	7.3
Seasoning and handling [3]	3.7	4.7	2.1	2.5	5.2	6.1
Finishing	3.4	4.4	2.2	3.1	5.4	3.0
Shipping	2.2	2.4	1.8	1.4	1.7	3.8
Miscellaneous	.3	.4	.2	.3	.4	.4

[1] Relatively few timbers are produced in this region.
[2] Sawmill labor for timbers in the southern pine region was based only on large mills. The man-hours for other types of lumber for this region were based on large and small mills, and concentration plants operated in connection with portable sawmills.
[3] In the conversion of kiln dried lumber into the many kinds of planing-mill lumber there is a waste of approximately 10 percent in manufacturing.

The miscellaneous labor shown in table 2 includes the work of superintendents, and maintenance and clean-up men, not chargeable to each department. The man-hours were virtually the same for the three types of lumber and for the different regions. The average for all regions for each type of lumber was 0.3 man-hour per thousand board feet.

Selling and Administration, and Transportation

It is impossible to compute for each type of sawmill product the labor involved in selling and administration and transportation. Consequently, the labor chargeable to these functions has been estimated for all types of products as a whole.

The time consumed in selling and administration for all types of sawmill products was estimated at 1.6 man-hours per thousand board feet, for all regions. In the southern pine, southern hardwood, and redwood regions these activities required 2.0 man-hours; in the western pine region, 1.2 man-hours; and in the Douglas fir, western hemlock, and cedar region, 1.0 man-hour.

The transportation labor for all regions was estimated at 7.9 man-hours per thousand board feet, of which 6.4 were required for the rail or cargo haul, and 1.5 man-hours for trucking from the terminal to the site of construction. In the estimate all the lumber from the southern pine, western pine, and southern hardwood regions was considered to have been moved to the terminal by rail.[8] Twenty percent of the lumber from the redwood region and 50 percent from the Douglas fir, western hemlock, and cedar region was moved to the market by rail;[9] the remaining lumber was shipped by cargo to the eastern ports through the Panama Canal or exported. The labor time required for cargo shipping, including the stevedore operations of loading and unloading the boat, was found to be 3.2 man-hours per thousand board feet. It was estimated that the labor involved in trucking from the terminal to the site of construction would average the same in all regions. To transport 1,000 board feet of lumber from the southern pine region to the site of construction, it was calculated that 7.3 man-hours were required; from the western pine region, 9.9 man-hours; from the Douglas fir, western hemlock, and cedar region, 9.7 man-hours; from the redwood area, 8.6 man-hours; and from the southern hardwood region, 4.1 man-hours.

Summary, by Operations

The number of man-hours involved in the logging operations varied considerably with each region depending on the stand of timber, the species of trees handled, and the labor-saving devices used. Thus, as shown in table 3, logging in the southern hardwood region required

[8] The average freight cost was $8 per thousand board feet for the southern pine region, $11.50 for the western pine region, and $3.50 for the southern hardwood area.

[9] The rail freight cost for the redwood region was $15 per thousand board feet; and for the Douglas fir, western hemlock, and cedar $18 per thousand board feet.

13.6 man-hours per thousand board feet; in the southern pine area, 9.9 man-hours; in the redwood region, 7.8 man-hours; in the western pine region 6.6 man-hours; and in the Douglas fir, western hemlock, and cedar region 4.9 man-hours. Man-hours for these operations chargeable to planing-mill lumber were increased by 10 percent, because 1,100 feet of green lumber are utilized in the manufacture of 1,000 feet of planing-mill lumber.

The man-hours required in manufacturing vary not only among the different regions, but also among the types of products within the same region. Relatively few timbers are produced in the western pine and redwood regions. In the other three regions the manufacture of timbers required fewer man-hours than did that of the more finished and refined lumber.

Because of the inherent characteristics of the wood and because of local labor conditions, manufacturing required a greater number of man-hours in the southern hardwood region than elsewhere. In the manufacture of 1,000 board feet of yard lumber, the redwood region required more man-hours than did any of the other softwood regions, but in the manufacture of planing-mill lumber required only 16.1 man-hours as compared with 17.8 in the southern pine area. Large-scale production and labor-saving machinery are universally used in the redwood region, but products of that region appear in the lumber markets in small-size stock requiring a comparatively large number of man-hours to manufacture.

The number of man-hours spent in selling and administration varied from 1.0 in the Douglas fir, western hemlock, and cedar region to 2.0 man-hours in the southern hardwood, redwood, and southern pine regions.

The man-hours of labor involved in transportation ranged from 4.1 man-hours for the southern hardwood region to 9.9 man-hours per 1,000 board feet for the western pine region. In order to compete successfully with the more advantageously located eastern mills, many of the Douglas fir, western hemlock, and cedar mills are located at tidewater points and ship their lumber by water rather than by rail.

The average for all regions shows that the number of man-hours required in selling and administration, and transportation do not vary for timbers, yard lumber, and planing-mill lumber. Manufacturing is the operation responsible for the variation in the total number of man-hours required. In the plants studied, timbers required 7.8 man-hours for manufacturing; yard lumber, 10.5 man-hours; and planing-mill lumber 14.3 man-hours.

The data in table 3 reveal the fact that the number of man-hours required to produce a thousand board feet of lumber increased with the degree of finish and refinement. The average for all producing regions shows that 25.4 man-hours were required to produce and distribute 1,000 board feet of timbers; 28.1 man-hours, for yard lumber;

and 32.7 man-hours for planing-mill lumber. Planing-mill lumber required 29 percent more man-hours of labor for production and distribution than timbers.

Table 3.—Summary of Man-Hours Required to Produce and Distribute 1,000 Board Feet of Lumber in Principal Producing Regions, by Operations

Operation	Average, all regions			Southern pine region			Western pine region		
	Timbers	Yard lumber	Planing-mill lumber [1]	Timbers	Yard lumber	Planing-mill lumber [1]	Timbers	Yard lumber	Planing-mill lumber [1]
All operations	25.4	28.1	32.7	27.6	32.2	38.0	[2]	25.3	27.5
Logging	8.1	8.1	8.9	9.9	9.9	10.9	[2]	6.6	7.3
Manufacturing	7.8	10.5	14.3	8.4	13.0	17.8	[2]	7.6	9.1
Selling and administration	1.6	1.6	1.6	2.0	2.0	2.0	[2]	1.2	1.2
Transportation	7.9	7.9	7.9	7.3	7.3	7.3	[2]	9.9	9.9
	Douglas fir, western hemlock, and cedar region			Redwood region			Southern hardwood region		
All operations	19.9	22.1	26.6	[2]	32.2	35.3	33.9	36.0	41.7
Logging	4.9	4.9	5.4	[2]	7.8	8.6	13.6	13.6	15.0
Manufacturing	4.3	6.5	10.5	[2]	13.8	16.1	14.2	16.3	20.6
Selling and administration	1.0	1.0	1.0	[2]	2.0	2.0	2.0	2.0	2.0
Transportation	9.7	9.7	9.7	[2]	8.6	8.6	4.1	4.1	4.1

[1] The conversion of green lumber into planing-mill lumber results in a loss of 10 percent in lumber. An allowance has been made for this loss in the logging and manufacturing operations.
[2] Relatively few timbers are produced in this region.

More man-hours were required to produce and distribute 1,000 board feet of lumber in the southern hardwood region than in any other region studied. The production of timbers in the southern hardwood region required over 33 percent more man-hours than the average for all regions. The number of man-hours required to produce and distribute 1,000 board feet of yard lumber in this section exceeded the average for all regions by 28 percent; and those required for planing-mill lumber exceeded the average by 28 percent. The higher labor requirements were due primarily to the specific gravity and density of the wood produced in this region. Lumber in the southern hardwood region, moreover, is produced in smaller-size stock and in smaller producing units, requiring more labor per unit of output and much less highly mechanized than the modern mills on the west coast.

Labor Required in Production and Distribution of Plastering Lath, Shingles, and Douglas-Fir Plywood

PLASTERING lath, shingles, and Douglas-fir plywood are other sawmill products manufactured directly from the logs.

Plastering lath is manufactured from the waste material of the sawmills. The 4-foot lath is standard, but sometimes the pieces vary considerably in length. It was calculated that, in the plants studied, 1.6 man-hours were required to log enough lumber to produce 1,000 pieces of lath; 3.2 man-hours were required in the factory production;

0.2 man-hour, for selling and administration; and 2.6 man-hours for transportation.[10]

The average of all operations indicates that 3.8 man-hours of labor were required to produce and distribute one square of cedar shingle. Since shingles are manufactured directly from the log, only 0.5 man-hour was required to produce the necessary raw material. Factory production required 55 percent of the total number of man-hours; selling and administration, 5 percent; and transportation, 26 percent.

In all, 24.5 man-hours were required to produce and distribute 1,000 square feet of Douglas fir plywood. Plywood is manufactured directly from the log and 2.7 man-hours were required, in the mills studied, to produce a quantity of logs sufficient to manufacture 1,000 square feet of plywood. Factory processes accounted for 62 percent of the man-hours; selling and administration, for 6 percent; and transportation, for 21 percent.

Table 4.—Man-Hours Required to Produce and Distribute Plastering Lath, Cedar Shingle, and Plywood

Product	Unit	Number of man-hours required				
		All operations	Raw material production	Factory production	Selling and administration	Transportation [1]
Plastering laths	1,000 pieces	7.6	[2] 1.6	3.2	0.2	2.6
Cedar shingles	Square	3.8	[2] .5	2.1	.2	1.0
Plywood	1,000 square feet	24.5	[2] 2.7	15.1	1.5	5.2

[1] Includes only the man-hours required to move the product from the factory to the site of construction.
[2] Includes logging only.

Labor Required in Production and Distribution of Millwork Products

THERE are a large number of millwork products on the market, varying from simple articles such as moldings, casings, and hardwood flooring to more highly fabricated commodities such as frames, sash, doors, blinds, screens, porch work, mantels, cabinet work, stairs, and stair parts. Some of the more important products selected for the present study are moldings, casings, frames, sash, and doors.

Stock millwork.—The mills manufacturing millwork products are located in all sections of the country, but the greater proportion of the stock mills are on the Pacific coast and in the northern Mississippi Valley. The Mississippi Valley factories were established several generations ago before the supply of lumber receded westward, but because of the large supply of available skilled labor and their proximity to the market, they have been able to compete with factories more favorably located in respect to raw material.

[10] Transportation labor for lath, cedar shingles, and plywood is based on the assumption that all of these products were shipped to a terminal by rail. The man-hours are based on a rail freight cost for lath of $2.50 per thousand; shingles, of 75 cents per square; for plywood, of 60 cents per 100 pounds. Trucking is based on an estimate of 1.5 man-hours per ton.

The Bureau's study included a representative group of mills on the Pacific coast and in the Mississippi Valley. Some of these specialize in a single product, such as doors made from Douglas fir, but others, especially those located in the Mississippi Valley, manufacture a full line of stock millwork.

Stock millwork, such as sash, doors, moldings, frames, and trim, is produced in standard sizes and designs, and large-scale production is therefore possible. Analysis of the labor requirements in this branch of the industry indicated that the production of 100 two-panel interior doors made of Douglas fir required a total of 156 man-hours, of which the labor involved in the production of the raw material accounted for 47 percent, factory production for 28 percent, selling and administration for 4 percent, and transportation [11] from the factory to the site of construction for 21 percent.

The production of 100 exterior doors made from western pine required a total of 715 man-hours, the raw material requiring 178 man-hours, factory production 453 man-hours, selling and administration 50 man-hours, and transportation 34 man-hours.

One hundred western pine two-panel interior doors required 156 man-hours to produce. Of this time, 90 hours were used to produce and prepare the raw material, 38 man-hours for the factory processes, 7 man-hours for selling and administration, and 21 man-hours for transportation.

Double-hung unglazed white pine or fir sash required 53 man-hours per 100 units. Production of material and factory production together accounted for 79 percent of this time, the number of man-hours being equally divided between them. Transportation required approximately twice the number of man-hours required for selling and administration.

The processes involved in the production, distribution, and preparation of the raw material for a thousand lineal feet of western pine exterior molding required 9 man-hours of labor, or three times the number of man-hours required in factory production. Selling and administration required 1 man-hour, and transportation to the site of construction 2 man-hours.

Nearness to the source of raw material, an adequate supply of skilled labor, and favorable freight rates tend to center the production of southern hardwood flooring in the vicinity of Memphis, Tenn. Eighty-three man-hours were required to produce 1,000 flooring feet [12] of southern hardwood flooring. The production of raw material, including transportation and all allowance for waste required 45 man-hours; factory production, 27 man-hours; selling and adminis-

[11] Transportation of millwork was calculated on the assumption that all millwork products were shipped by rail to a terminal, and then trucked to the site of construction. The freight cost for shipping fir doors and sash was $1.10 per 100 pounds, while other millwork freight costs were 60 cents per 100 pounds. Trucking required 1.5 man-hours per ton.

[12] A flooring foot is a measure of surface area equivalent to 1 square foot, thirteen-sixteenths of an inch thick

tration, 4 man-hours; and transportation [13] of the finished flooring, 7 man-hours.

Table 5.—Man-Hours Required to Produce and Distribute Stock Millwork Products

Product	Unit	Number of man-hours required				
		All operations	Raw material production [1]	Factory production	Selling and administration	Transportation [2]
Douglas fir interior door, 2-panel, 2 feet 8 inches by 6 feet 8 inches by 1⅜ inches	100	156	73	44	6	33
Western pine interior door, 2-panel, 2 feet 8 inches by 6 feet 8 inches by 1⅜ inches	100	156	90	38	7	21
Western pine French interior door, unglazed, 2 feet 6 inches by 7 feet 6 inches by 1¾ inches	100	251	66	156	15	14
Western pine exterior door, 3 feet by 7 feet by 1¾ inches	100	715	178	453	50	34
Western pine outside door frame	100	207	124	46	15	22
Western pine inside door frame	100	66	27	25	5	9
Western pine window frame, for double-hung sash	100	150	85	38	12	15
White pine or fir sash, double-hung, unglazed, 24 inches by 24 inches	100	53	21	21	4	7
Western pine inside picture molding	lineal feet	1,000	11	6	3	1	1
Western pine casings	do	1,000	18	12	3	1	2
Western pine exterior molding	do	1,000	15	9	3	1	2
Southern hardwood flooring	flooring feet	1,000	83	[3] 45	27	4	7

[1] Includes logging, sawmilling, handling, seasoning, planing, shipping to factory, yarding, cut-up and ripping operations.
[2] Includes only the man-hours required to move the product from the factory to the site of construction.
[3] Includes logging, sawmilling, handling, seasoning and shipping to factory.

Special millwork.—Small local planing mills manufacturing millwork products of special size and design are in operation in all communities in which there is a sufficient volume of building. These mills are frequently operated in connection with a retail lumber and building-supply business. Since each item of special millwork is made to individual specifications, the amount of labor involved in an interior door, for example, is much greater than in a stock interior door which has been manufactured in large mills where the economies of mass production prevail. Special millwork products were studied in three typical mills in the Middle West and three typical mills in the southeastern part of the country, selected upon recommendation of the Millwork Cost Bureau. The mills selected were representative of their respective regions.

In the six mills covered, the average labor time involved in the production of the raw material for one special interior door was 1.5 man-hours; factory production, 0.9 man-hour; and overhead labor, including the trucking of the product to the site of construction, 0.5 man-hour.

One man-hour of labor was required to produce one double-hung pine sash; 1 window frame required 4.7 man-hours; and special molding,

[13] The calculation for transportation of southern hardwood flooring was based on rail shipment and a freight cost of $7.40 per thousand flooring feet. Trucking was figured at 1.5 man-hours per thousand flooring feet.

2.3 man-hours per 100 lineal feet. For each of the products the number of man-hours required to produce and distribute the raw material was equal to or greater than the man-hours for factory labor.

Overhead labor requirements include general clean-up workers, maintenance men, office employees, and the like, plus the man-hours required to truck the product to the construction site. It should be noted that the number of man-hours of overhead labor per unit of output varied inversely with the volume of business.

Table 6.—Man-Hours Required to Produce and Distribute Special Millwork Products

Product	Unit	Number of man-hours required			
		All operations	Raw material production [1]	Factory production	Overhead [2]
Pine interior door, 2-panel, 2 feet 8 inches by 6 feet 8 inches by 1¾ inches	1	2.9	1.5	0.9	0.5
Pine sash, double-hung, unglazed, 24 inches by 24 inches	1	1.0	.4	.4	.2
Pine window frame, to fit above double-hung sash	1	4.7	2.0	1.8	.9
Pine molding, average of all usual kinds	lineal feet 100	2.3	1.3	.7	.3

[1] Includes logging, sawmilling, handling, seasoning, planing, shipping to factory, yarding, cut-up and ripping operations.
[2] Includes the trucking of the product to the site of construction, as well as the office, administrative and selling labor.

Labor Required in the Production of Lumber Used in Federal Construction Projects

THE Bureau of Labor Statistics has been collecting statistics on the value of material orders placed on construction projects financed by P. W. A. funds since the beginning of the program in July 1933, by funds provided by the Reconstruction Finance Corporation since April 1934, from regular governmental appropriations from July 1934, and by The Works Program beginning in July 1935. The value of orders placed for lumber and lumber products on construction jobs financed by Federal funds from the time the Bureau began collecting data on the various programs through December 1936 amounted to $154,207,000. On the basis of this study approximately 155,000,000 man-hours were required in the production and distribution of this lumber. On the Public Works program alone, from July 1933 through December 1936, orders placed for lumber and lumber products used on projects financed in whole or in part by the P. W. A. called for $89,258,000 worth of lumber. Translating the lumber used on P. W. A. financed projects into the employment created in its manufacture and transportation, it is estimated that 90,000,000 man-hours were consumed. Timbers and yard lumber accounted for 73,000,000 man-hours of this total. Twenty-six percent of this labor was used in logging, 41 percent in manufacturing, 5 percent in selling and administration, and 28 percent in transportation.

THE NEGRO IN INDUSTRY

Earnings and Hours of Negro Workers in Independent Tobacco Stemmeries in 1933 and 1935

By Jacob Perlman, of the Bureau of Labor Statistics

NEGRO workers in independent or dealers' tobacco stemmeries, who comprise virtually the entire working force in these establishments, are among the lowest-paid employees in the country. In September 1935, the average earnings of these workers amounted to 16 cents per hour. With an average of 43.4 hours of employment per week, their weekly earnings averaged $6.92.

The independent stemmeries were never subject to code regulations under the National Recovery Administration. It is notable, therefore, that the wages and hours of the workers in these plants improved markedly between March 1933 and March 1935. In both March 1933 and March 1935, however, their earnings were much smaller and their hours much longer than those of corresponding workers in the manufacturers' stemmeries.

No appreciable change occurred in the average hourly earnings of workers in independent stemmeries between March and September 1935. However, their average weekly hours advanced somewhat, thus raising the level of average weekly earnings during this 6-month period.

The above facts were disclosed by surveys of independent stemmeries made by the Bureau of Labor Statistics, covering the months of March 1933, March 1935, and September 1935.

Economic Factors in the Industry

Manufacturers' stemmeries are far more important in the industry than are the independent stemmeries.

The manufacturers' stemmeries are usually operated as separate departments in conjunction with larger establishments making cigarettes, chewing- and smoking-tobacco, and cigars. They ordinarily maintain their own buying forces, purchasing large quantities of tobacco that are often stored for long periods of time. As a result, it is possible for them to carry on stemming operations on the "dry" tobacco throughout the year, according to their needs in the manufacture of their own products.

The independent stemmeries, on the other hand, are nearly all operated by tobacco-leaf dealers, who are engaged principally in buying "green" leaf tobacco (i. e. tobacco newly harvested and cured) but who may also engage in stemming it. Some of this buying and stemming is for the smaller tobacco manufacturers who, either because of lack of equipment or for other reasons, do not perform their own stemming. Much of this buying and stemming, however, is for foreign customers, who do not wish to pay freight on the stems and therefore have the product stemmed before shipment.

Some of the independent stemmeries are able to extend their operations over the greater part of the year, while others operate on a seasonal basis during the fall months. The first group includes establishments with adequate storage facilities to accommodate a supply of "green" leaf tobacco for the year, stemming it gradually and in sufficient quantities to meet current orders. The second group includes stemmeries that, for lack of storage facilities or for other reasons, complete all of their stemming in the fall season and dispose of their product at once.

The independent stemmeries are usually confronted with some conditions different from those found in manufacturers' stemmeries. Thus, the independent stemmeries that operate on a seasonal basis, usually 3 or 4 months in the fall, are unable to build up a permanent labor force selected for efficiency. As seasonal operation involves heavy overhead charges if there is an extensive utilization of machines, hand stemming has predominated in this branch of the industry. The independent stemmeries also find it necessary in most cases to locate in small towns within the tobacco-growing areas. Thus, they have to select their employees from a limited labor supply. But it must also be noted that the workers have limited opportunities for alternative industrial employment. Lastly, the stemmeries engaged in buying and stemming tobacco for export are in direct competition with foreign labor, as it is quite possible to transfer the stemming operations abroad.

The contrast between the manufacturers' and independent stemmeries was brought out during the National Recovery Administration. The code for the cigarette, snuff, and chewing- and smoking-tobacco manufacturing industry, which became effective on February 18, 1935, covered only the manufacturers' stemmeries, thus excluding by implication the independent stemmeries. The same was done in the code for the cigar-manufacturing industry.

There was, of course, a demand for a code to cover the independent stemmeries. The latter, however, declared that any fixing of minimum wages and maximum hours approximating those in the tobacco-manufacturing industries would be ruinous to them. It was argued that, in view of the type of worker employed, the introduction of

minimum wages would tend to throw out of employment a group of persons whose chances for reemployment would be small. It was believed that some male employees might be adversely affected, but that more especially the numerous female workers would be so affected. Thus, it was pointed out that some of the establishments would install stemming machines to take the place of labor, while others would make a more rigorous selection of workers and would eliminate a considerable number of the less efficient and marginal persons. In this connection, it was also pointed out that the independent stemmeries would be unable to compete with foreign labor, as any increase in labor costs would either curtail the export of tobacco or transfer the stemming operations to the importing countries. With respect to maximum hours, the argument advanced was that, owing to the seasonal work in many plants and the perishable quality of the product, it was necessary to work long hours in order to dispose of the tobacco.

Scope of Bureau's Surveys

In the spring of 1935, the Bureau of Labor Statistics made a survey of earnings, hours, and working conditions in the cigarette, snuff, and chewing- and smoking-tobacco manufacturing industry. Information was obtained for two pay-roll periods, one in the latter half of March 1933 (pre-code) and another in the latter half of March 1935 (code). The survey covered the stemming departments along with the rest of the manufacturing industry.[1]

In view of the special circumstances affecting the independent stemmeries, the above survey was extended to include them, thus making possible a comparison of earnings and hours between plants covered by the code and those excluded from it. The survey of independent stemmeries was limited to three States—Kentucky, North Carolina, and Virginia—the principal areas where "green" leaf tobacco is stemmed. Data for a weekly pay-roll period for both March 1933 and March 1935 were obtained from 10 representative establishments, of which 3 were in Kentucky, 4 in North Carolina, and 3 in Virginia. The Negro workers in these plants numbered 3,513 in March 1933 and 3,339 in March 1935. These stemmeries, located mostly in small towns, were plants carrying on their operations beyond the fall season. Their labor force varied from fewer than 100 to over 1,000 employees, all of whom were engaged exclusively in hand stemming. The detailed information with respect to the coverage of these plants appears in table 1.

Owing to the fact that the hand stemmers are piece workers, there was no available record of the time worked by them in any of the establishments in March 1933 and March 1935; hence, the figures obtained for hand stemmers were limited to weekly earnings. In the

[1] For a summary of the data collected in this survey, see article on Earnings in Cigarette, Snuff, and Chewing- and Smoking-Tobacco Plants in 1933-35, in the May 1936 Monthly Labor Review (pp. 1322-1335).

case of the remaining employees, however, all of whom were time workers, the information covered both weekly hours and weekly earnings, the last two figures making it possible to compute average hourly earnings.

Table 1.—Coverage of Survey in Independent Stemmeries, March 1933 and March 1935

State, and sex of employees	March 1933			March 1935		
	Total	Hand stemmers	Other employees	Total	Hand stemmers	Other employees
All States	3,513	2,191	1,322	3,339	2,035	1,304
Males	1,286	617	669	1,014	344	670
Females	2,227	1,574	653	2,325	1,691	634
Kentucky	1,144	930	214	930	716	214
Males	687	538	149	427	277	150
Females	457	392	65	503	439	64
North Carolina	1,022	383	639	1,162	501	661
Males	294	-------	294	313	-------	313
Females	728	383	345	849	501	348
Virginia	1,347	878	469	1,247	818	429
Males	305	79	226	274	67	207
Females	1,042	799	243	973	751	222

A comparison of earnings and hours in March 1933 and March 1935 between independent and manufacturers' stemmeries cannot be made for all workers combined. This is due to the fact that many of the miscellaneous employees in a manufacturing plant are engaged in operations common to both the stemming and other departments. In an independent stemmery, on the other hand, the miscellaneous workers are confined to operations in that plant only. Hence, in a comparison of independent and manufacturers' stemmeries the miscellaneous employees must be omitted. As a result, the comparisons here are limited to selected occupations. The coverage of the latter in the two periods for both independent and manufacturers' stemmeries appears in table 2.[2]

In order to obtain complete information for all workers, including hand stemmers, another survey of independent stemmeries was conducted in the fall of 1935, at which time previous arrangement was made with the various establishments to keep a record of the time worked during 1 week by hand stemmers. The data covered a payroll period principally during the latter part of September. This survey included only 2 States, North Carolina and Virginia, there being 6 plants scheduled in the former and 5 in the latter, with a total employment of 4,085 Negro workers. The establishments selected were representative of the industry, including those that operate only during the fall months as well as those that continue their operations

[2] For a similar comparison of wages and hours between independent and manufacturers' stemmeries in May 1934, see U. S. Women's Bureau, Bulletin No. 127: Hours and Earnings in Tobacco Stemmeries.

after the season. These stemmeries, varying in size from small to large units, were located mostly in the smaller towns, and were also all engaged exclusively in hand stemming. Table 3 presents a detailed picture of the coverage of these plants.

Table 2.—Coverage in Selected Occupations in Independent and Manufacturers' Stemmeries, March 1933 and March 1935

State and selected occupation	Independent stemmeries		Manufacturers' stemmeries	
	March 1933	March 1935	March 1933	March 1935
All States:				
Floor workers, male	511	482	348	1,233
Floor workers, female	208	129	54	118
Pickers and searchers, male [1]	13	20	----	----
Pickers and searchers, female	183	247	368	1,295
Stemmers, hand, male	617	344	361	248
Stemmers, hand, female	1,574	1,691	1,071	1,458
Kentucky:				
Floor workers, male	91	94	63	141
Floor workers, female	----	2	11	3
Pickers and searchers, male [1]	9	7	----	----
Pickers and searchers, female	14	12	44	47
Stemmers, hand, male	538	277	----	3
Stemmers, hand, female	392	439	102	313
North Carolina:				
Floor workers, male	249	261	154	553
Floor workers, female	132	82	12	32
Pickers and searchers, male [1]	1	4	----	----
Pickers and searchers, female	119	159	295	719
Stemmers, hand, male	----	----	215	218
Stemmers, hand, female	383	501	481	926
Virginia:				
Floor workers, male	171	127	131	539
Floor workers, female	76	45	31	83
Pickers and searchers, male [1]	3	9	----	----
Pickers and searchers, female	50	76	29	529
Stemmers, hand, male	79	67	146	27
Stemmers, hand, female	799	751	488	219

[1] Excluded from subsequent tabulations, due to the small number of workers found.

Table 3.—Coverage of Survey in Independent Stemmeries, September 1935

State, and sex of employees	Total	Floor workers	Pickers and searchers	Hand stemmers	Miscellaneous workers
All States	4,085	894	353	2,075	763
Males	1,261	742	5	344	170
Females	2,824	152	348	1,731	593
North Carolina	1,868	464	199	879	326
Males	481	412	----	5	64
Females	1,387	52	199	874	262
Virginia	2,217	430	154	1,196	437
Males	780	330	5	339	106
Females	1,437	100	149	857	331

With data available for North Carolina and Virginia in September 1935, it is possible to compare figures for the latter period with those for March 1935. With regard to average hourly earnings and average weekly hours, however, this comparison has to be limited by excluding hand stemmers. On the other hand, in the case of

average weekly earnings, a comparison may be made on the basis of total employees. In making such comparisons, it should be remembered that they are not based on identical establishments, there being only four plants for which figures are available for both periods. The coverage in March 1935 and September 1935, upon which these figures are based, is shown in table 4.

Table 4.—Coverage of Surveys in Independent Stemmeries in North Carolina and Virginia, March 1935 and September 1935

State, and sex of workers	March 1935			September 1935		
	Total	Hand stemmers	Other employees	Total	Hand stemmers	Other employees
All States	2,837	1,638	1,199	4,085	2,075	2,010
Males	789	237	552	1,261	344	917
Females	2,048	1,401	647	2,824	1,731	1,093
North Carolina	1,162	501	661	1,868	879	989
Males	313		313	481	5	476
Females	849	501	348	1,387	874	513
Virginia	1,675	1,137	538	2,217	1,196	1,021
Males	476	237	239	780	339	441
Females	1,199	900	299	1,437	857	580

The working force in independent stemmeries is composed almost entirely of Negroes, only a small number of white employees having been found in the plants covered in March 1933 and March 1935. The white workers were largely in Kentucky, where most of them were employed as hand stemmers. A few white workers also appeared in the plants of North Carolina and Virginia that were scheduled in September 1935. Outside of the hand stemmers in Kentucky, virtually all of the white employees occupied supervisory positions. Hence, they were omitted from the tabulations, the survey being confined entirely to Negro workers.

Changes in Earnings and Hours in Independent Stemmeries Between March 1933 and March 1935

WAGES were extremely low and hours fairly long in independent stemmeries in March 1933. Yet, in spite of the substantial increases in wages and reductions in hours, the standards in this industry in March 1935 were still considerably below those set up by any code under the National Recovery Administration.

Average hourly earnings of all employees, excluding hand stemmers.—The gain in average hourly earnings of all employees, exclusive of hand stemmers, between March 1933 and March 1935 was 6 cents or 48.8 percent, thus increasing the figure from 12.3 to 18.3 cents. In fact, the 1933 average practically became the minimum in 1935. Thus, as one may see from table 5, there were only one-half of 1 per-

cent of the workers receiving under 12 cents per hour in March 1935, as compared with nearly 50 percent in March 1933. These extremely low-paid employees were shifted to the higher class in 1935, although at that time only 3.2 percent of any workers were paid as much as 26 cents and over.

Table 5.—Distribution of Employees in Independent Stemmeries by Average Hourly Earnings, Weekly Hours, and Weekly Earnings, March 1933 and March 1935

All employees, excluding hand stemmers

Earnings or hours class	Total		Males		Females	
	March 1933	March 1935	March 1933	March 1935	March 1933	March 1935
Average hourly earnings						
Under 6 cents	7.2	.....	1.0	.....	13.6	.....
6 and under 8 cents	22.4	.....	1.3	.....	44.0	.....
8 and under 10 cents	.8	.....	.1	.....	1.4	.....
10 and under 12 cents	18.9	0.5	20.8	.....	17.0	0.9
12 and under 14 cents	16.9	31.6	20.2	.....	13.6	65.2
14 and under 16 cents	14.9	14.0	19.7	0.1	10.1	28.7
16 and under 18 cents	5.4	2.6	10.3	.3	.3	5.0
18 and under 20 cents	.2	.2	.4	.3	.....	.....
20 and under 22 cents	7.6	21.4	14.9	41.5	.....	.2
22 and under 24 cents	3.0	12.8	6.0	24.9	.....	.....
24 and under 26 cents	1.5	13.7	3.0	26.8	.....	.....
26 and under 28 cents	.7	.7	1.3	1.3	.....	.....
28 cents and over	.5	2.5	1.0	4.8	.....	.....
Total	100.0	100.0	100.0	100.0	100.0	100.0
Weekly hours						
Under 8 hours	2.0	2.1	1.5	2.1	2.6	2.2
8 and under 16 hours	3.1	4.8	2.5	3.9	3.7	5.8
16 and under 24 hours	2.0	3.7	2.1	4.5	1.8	2.8
24 and under 32 hours	7.3	7.4	7.5	6.9	7.0	8.0
32 and under 40 hours	10.1	9.4	8.2	10.0	11.9	8.9
40 and under 48 hours	9.8	15.3	8.8	17.3	10.9	13.1
48 and under 56 hours	17.2	41.6	14.5	32.2	19.9	51.5
56 and under 64 hours	36.0	10.8	38.3	13.6	33.9	7.7
64 and under 72 hours	7.7	2.5	9.4	4.9	6.0	.....
72 and under 80 hours	4.1	1.8	6.3	3.4	1.8	.....
80 hours and over	.7	.6	.9	1.2	.5	.....
Total	100.0	100.0	100.0	100.0	100.0	100.0
Weekly earnings						
Under $1	2.9	1.8	1.3	1.5	4.4	2.1
$1 and under $2	5.1	3.5	1.9	1.3	8.4	5.7
$2 and under $3	8.9	2.6	2.5	2.4	15.4	2.8
$3 and under $4	13.3	4.8	5.5	2.5	21.3	7.1
$4 and under $5	13.2	5.0	8.1	2.5	18.4	7.6
$5 and under $6	9.2	6.8	11.5	2.5	6.9	11.3
$6 and under $7	9.7	19.0	13.7	3.0	5.5	35.9
$7 and under $8	14.7	12.9	13.6	6.6	15.8	19.7
$8 and under $9	5.7	7.4	9.3	9.3	2.0	5.4
$9 and under $10	4.2	5.8	8.1	9.0	.2	2.4
$10 and under $12	5.5	12.0	9.3	23.4	1.7	.....
$12 and under $14	3.9	9.9	7.8	19.4	.....	.....
$14 and under $16	2.0	4.8	3.9	9.3	.....	.....
$16 and under $20	1.5	3.1	3.0	6.1	.....	.....
$20 and over	.2	.6	.5	1.2	.....	.....
Total	100.0	100.0	100.0	100.0	100.0	100.0

Table 5.—Distribution of Employees in Independent Stemmeries by Average Hourly Earnings, Weekly Hours, and Weekly Earnings, March 1933 and March 1935—Continued

All employees, including hand stemmers

Earnings or hours class	Total		Males		Females	
	March 1933	March 1935	March 1933	March 1935	March 1933	March 1935
Weekly earnings						
Under $1	4.6	3.1	1.7	2.6	6.2	3.3
$1 and under $2	7.0	6.3	2.3	3.0	9.8	7.7
$2 and under $3	14.2	6.1	4.5	4.7	19.8	6.7
$3 and under $4	17.1	10.5	9.0	5.5	21.8	12.7
$4 and under $5	16.6	13.0	15.6	7.7	17.2	15.3
$5 and under $6	12.2	12.9	17.0	7.6	9.5	15.2
$6 and under $7	8.9	15.4	14.3	6.9	5.7	19.1
$7 and under $8	8.5	10.2	11.4	7.1	6.8	11.5
$8 and under $9	3.5	6.1	6.5	8.2	1.8	5.2
$9 and under $10	2.2	3.5	4.8	6.7	.7	2.1
$10 and under $12	2.3	5.4	5.1	16.3	.7	.7
$12 and under $14	1.5	4.1	4.0	12.8	----	.3
$14 and under $16	.7	1.9	2.0	6.1	----	.1
$16 and under $20	.6	1.3	1.6	4.0	----	.1
$20 and over	.1	.2	.2	.8	----	----
Total	100.0	100.0	100.0	100.0	100.0	100.0

For males, the increase in average earnings per hour was from 15.4 cents in March 1933 to 22.7 cents in March 1935, which is a gain of 7.3 cents or 47.4 percent. The extent to which this rise affected the distribution may be seen from the fact that, while 73.8 percent of these employees were paid less than 20 cents per hour in 1933, there were only 0.7 percent earning under that amount in 1935. In the latter period, however, 93.2 percent were concentrated within the relatively narrow range of 20 and under 26 cents, with only 6.1 percent earning 26 cents and over.

The advance in average hourly earnings for females was from 8.9 cents in March 1933 to 13.4 cents in March 1935, a rise of 4.5 cents or 50.6 percent. This gain resulted in only 0.9 percent of the workers earning under 12 cents in 1935, as compared with 76.0 percent in 1933. In spite of this shift, there were 93.9 percent still earning 12 and under 16 cents in 1933, with hardly any women receiving 18 cents and over.

An analysis of the data on a geographical basis, which may be made from table 6, shows that in March 1933 the lowest earnings were paid in North Carolina. Male and female workers in Virginia averaged respectively more than in Kentucky, but the preponderance of males in the stemmeries of the latter State raised its total average slightly above that of the former State. The largest increases between March 1933 and March 1935 occurred in North Carolina, the effect being to raise its averages to a level nearer to that of the other States, but the earnings there still remained the lowest of the three areas. The increases in Virginia were much smaller than in Kentucky, which definitely placed the average hourly earnings of the latter State above those of the former in March 1935.

Table 6.—**Average Hourly Earnings, Weekly Hours, and Weekly Earnings of Employees in Independent Stemmeries, March 1933 and March 1935**

State, and sex of employees	All employees, excluding hand stemmers									All employees, including hand stemmers: Average weekly earnings		
	Average hourly earnings			Average weekly hours			Average weekly earnings					
	Mar. 1933	Mar. 1935	Percent of change	Mar. 1933	Mar. 1935	Percent of change	Mar. 1933	Mar. 1935	Percent of change	Mar. 1933	Mar. 1935	Percent of change
All States	$0.123	$0.183	+48.8	50.0	44.6	−10.8	$6.13	$8.16	+33.1	$4.86	$6.18	+27.2
Males	.154	.227	+47.4	51.5	46.1	−10.5	7.93	10.46	+31.9	6.59	8.64	+31.1
Females	.089	.134	+50.6	48.4	42.9	−11.4	4.29	5.73	+33.6	3.86	5.11	+32.4
Kentucky	.155	.216	+39.4	42.5	45.6	+7.3	6.58	9.84	+49.5	4.69	5.71	+21.7
Males	.175	.244	+39.4	43.9	43.9	.....	7.68	10.73	+39.7	5.45	7.00	+28.4
Females	.103	.157	+52.4	39.4	49.5	+25.6	4.08	7.75	+90.0	3.55	4.62	+30.1
North Carolina	.094	.174	+85.1	51.2	41.6	−18.8	4.81	7.22	+50.1	4.07	6.45	+58.5
Males	.124	.221	+78.2	54.7	44.2	−19.2	6.76	9.76	+44.4	6.76	9.76	+44.4
Females	.065	.126	+93.8	48.3	39.2	−18.8	3.16	4.93	+56.0	2.99	5.22	+74.6
Virginia	.149	.180	+20.8	51.7	48.7	−5.8	7.72	8.78	+13.7	5.61	6.28	+11.9
Males	.183	.223	+21.9	52.5	50.7	−3.4	9.63	11.31	+17.4	9.01	9.92	+10.1
Females	.117	.137	+17.1	51.0	46.8	−8.2	5.95	6.42	+7.9	4.61	5.26	+14.1

One of the striking characteristics of this industry is the relatively large differential in average earnings per hour between the sexes. There was very little variation in this differential among the three States during each period. However, quite an increase took place in the differential for each State between the two periods, due to greater absolute gains for males as compared with females. For all three States combined, the differential rose from 6.5 cents in March 1933 to 9.3 cents in March 1935.

Due to the existing geographical and sex differentials, the distributions in table 5 present some interesting contrasts in concentrations. Thus, both the male and female distributions in March 1933 are bimodal, which may be accounted for by the lower wage level in North Carolina as compared with Virginia and Kentucky. However, with the rise in the former wage level toward those of the other States, there is only a unimodal distribution in each case in 1935. Furthermore, combining the data for males and females, both the geographical and sex differentials are responsible for the trimodal distribution in 1933, whereas the influence of only the sex differential results in a bimodal distribution in 1935.

Weekly hours of all employees, excluding hand stemmers.—The average weekly hours in independent stemmeries, covering all workers other than hand stemmers, declined from 50.0 in March 1933 to 44.6 in March 1935, a decrease of 5.4 hours or 10.8 percent. Practically the same absolute and relative changes were reported for each sex, the decline being from 51.5 to 46.1 hours (5.4 hours or 10.5 percent) for males and from 48.4 to 42.9 hours (5.5 hours or 11.4 percent) for females. (See table 6.)

A more detailed picture of the downward shift in weekly hours between the two periods, however, may be seen from the distributions shown in table 5. Thus, there was only a small rise in the percentage of employees working under 40 hours per week, most of these persons being part-time employees. On the other hand, the percentage working 40 and under 56 hours increased considerably, while the percentage working 56 hours and over showed a corresponding reduction. The relative shift from 56 hours and over to 40 and under 56 hours was more pronounced for females than for males.

The longest average weekly hours in March 1933 were found in Virginia and North Carolina. The females in Virginia worked longer hours than those in North Carolina. Although the opposite was true in the case of male workers, the preponderance of females rendered the average for all employees slightly higher in Virginia than in North Carolina. The reduction in average hours per week between March 1933 and March 1935 was much greater in North Carolina than in Virginia, so that in March 1935 the latter showed considerably longer hours than the former for each sex as well as for all workers combined. Kentucky had the lowest average weekly hours in March 1933, but, as a result of an increase during the following 2 years, its average in March 1935 fell between those of North Carolina and Virginia.

In March 1933, male employees worked longer weekly hours on the average than females in each of the three States, the differential for all States combined amounting to 3.1 hours. In March 1935, the males still worked longer hours than females in North Carolina and Virginia, but the opposite was true in Kentucky (due to no change for males and a substantial increase for females between the two periods). The differential in favor of males for the three States combined was 3.2 hours in March 1935.

Weekly earnings.—Due to the reductions in average hours per week, the gains in average weekly earnings of all employees in independent stemmeries, exclusive of hand stemmers, were relatively smaller than those found respectively in average earnings per hour.[3] In the case of weekly earnings, however, it is possible to present data for all employees, including hand stemmers, although it should be pointed out that, since the weekly earnings of hand stemmers were lower than those of other workers, the figures covering all employees, including hand stemmers, are lower than those for all employees, excluding hand stemmers.

For both sexes, the average earnings per week of all employees, including hand stemmers, advanced from $4.86 in March 1933 to $6.18 in March 1935. This modest gain of $1.32 is reflected in the distributions of individual workers for the two periods (see table 5) by a decrease in the percentage of every class under $5 and an increase in the percentage of every class of $5 and over. However, the shift

[3] The only exception to this statement is the State of Kentucky.

of employees into higher wage classes did not extend very far, as may be seen from the fact that in 1935 only 12.9 percent received earnings of $10 and over.

The average weekly earnings of all male employees rose from $6.59 in March 1933 to $8.64 in March 1935, thus making for a gain of $2.05. As a result the number of workers paid under $8 decreased from 75.8 percent in 1933 to 45.1 percent in 1935. As regards the remaining employees in the latter period, those earning $12 and over amounted to only 23.7 percent of the total, with 4.8 percent paid $16 and over.

For females, the increase in average earnings per week amounted to only $1.25, or from a mere $3.86 in March 1933 to $5.11 in March 1935. This gain resulted from a decrease in the number of employees receiving under $5 from 74.8 percent in the earlier to 45.7 percent in the later period. The extent of low earnings among women even in 1935 may be seen from the fact that only 8.5 percent earned $8 and over, with 1.2 percent receiving $10 and over.

Geographically, the lowest average weekly earnings in March 1933 were found in North Carolina, the figure for both sexes amounting to $4.07. This may be compared with averages of $4.69 and $5.61 respectively in Kentucky and Virginia. An increase of 74.6 percent in the average earnings per week of females in North Carolina between March 1933 and March 1935, however, raised the wage level in this State to $6.45 for both sexes in the latter period. This was slightly greater than the average of $6.28 in Virginia and considerably above the average of $5.71 in Kentucky. (See table 6.)

In each of the three States, substantial differentials were found in favor of males as compared with females in the average earnings per week in March 1933, the differential for all three States combined amounting to $2.73. Due to an increase in the differential in every one of the three States between March 1933 and March 1935, the differential for all employees in the industry rose to $3.53 in March 1935.

Comparison of Earnings and Hours in Independent and in Manufacturers' Stemmeries, March 1933 and March 1935

With lower earnings and longer hours in independent as compared with manufacturers' stemmeries, the industry presents the remarkable situation of two types of plants in the same general locality operating under widely different levels of wages and hours.

Average hourly earnings.—Not only were the average hourly earnings during each period greater in manufacturers' as compared with independent stemmeries, but the differentials between the two increased considerably between March 1933 and March 1935, as will be seen by an examination of table 7. This was caused by the absolute gains in average earnings per hour in the manufacturers' stemmeries greatly exceeding those in the independent stemmeries.

Table 7.—Average Hourly Earnings, Weekly Hours, and Weekly Earnings, by Occupation, in Independent and Manufacturers' Stemmeries, March 1933 and March 1935

State and occupation	Independent stemmeries			Manufacturers' stemmeries		
	March 1933	March 1935	Percent of change	March 1933	March 1935	Percent of change
Average hourly earnings						
All States:						
Floor workers, male	$0.148	$0.223	+50.7	$0.269	$0.370	+37.5
Floor workers, female	.079	.129	+63.3	.173	.329	+90.2
Pickers and searchers, female	.087	.132	+51.7	.191	.293	+53.4
Kentucky:						
Floor workers, male	.171	.237	+38.6	.284	.375	+32.0
Floor workers, female	----	(1)	----	(1)	(1)	----
Pickers and searchers, female	(1)	(1)	----	.199	.297	+49.2
North Carolina:						
Floor workers, male	.122	.220	+80.3	.295	.360	+22.0
Floor workers, female	.063	.125	+98.4	(1)	.347	----
Pickers and searchers, female	.060	.124	+106.7	.193	.284	+47.2
Virginia:						
Floor workers, male	.176	.219	+24.4	.235	.380	+61.7
Floor workers, female	.109	.135	+23.9	.108	.317	+193.5
Pickers and searchers, female	.133	.138	+3.8	.162	.310	+91.4
Average weekly hours						
All States:						
Floor workers, male	50.3	45.0	−10.5	36.6	35.0	−4.4
Floor workers, female	50.2	44.1	−12.1	27.3	22.6	−17.2
Pickers and searchers, female	48.0	41.0	−14.6	34.8	33.2	−4.6
Kentucky:						
Floor workers, male	40.0	42.8	+7.0	44.1	35.0	−20.6
Floor workers, female	----	(1)	----	(1)	(1)	----
Pickers and searchers, female	(1)	(1)	----	37.5	[illegible]	−19.5
North Carolina:						
Floor workers, male	53.5	43.4	−18.9	32.9	37.3	+16.6
Floor workers, female	50.9	43.3	−14.9	(1)	34.4	----
Pickers and searchers, female	45.7	36.5	−20.1	34.5	37.9	+9.9
Virginia:						
Floor workers, male	51.2	49.8	−2.7	38.4	32.6	−15.1
Floor workers, female	49.0	45.8	−6.5	22.6	18.0	−20.4
Pickers and searchers, female	53.4	49.5	−7.3	34.3	27.1	−21.0
Average weekly earnings						
All States:						
Floor workers, male	$7.43	$10.03	+35.0	$9.86	$12.93	+31.1
Floor workers, female	3.99	5.69	+42.6	4.72	7.43	+57.4
Pickers and searchers, female	4.19	5.41	+29.1	6.67	9.74	+46.0
Stemmers, hand, male	5.14	5.11	−.6	5.49	12.77	+132.6
Stemmers, hand, female	3.69	4.87	+32.0	4.35	10.53	+142.1
Kentucky:						
Floor workers, male	6.85	10.16	+48.3	12.53	13.11	+4.6
Floor workers, female	----	(1)	----	(1)	(1)	----
Pickers and searchers, female	(1)	(1)	----	7.45	8.97	+20.4
Stemmers, hand, male	4.83	4.99	+3.3	----	(1)	----
Stemmers, hand, female	3.46	4.16	+20.2	5.59	8.18	+46.3
North Carolina:						
Floor workers, male	6.54	9.54	+45.9	9.45	13.42	+42.0
Floor workers, female	3.21	5.41	+68.5	(1)	11.94	----
Pickers and searchers, female	2.75	4.54	+65.1	6.66	10.77	+61.7
Stemmers, hand, male	----	----	----	6.83	13.00	+90.3
Stemmers, hand, female	2.83	5.43	+91.9	5.91	11.69	+97.8
Virginia:						
Floor workers, male	9.02	10.93	+21.2	9.04	12.39	+37.1
Floor workers, female	5.34	6.19	+15.9	2.44	5.69	+133.2
Pickers and searchers, female	7.09	6.85	−3.4	5.56	8.41	+51.3
Stemmers, hand, male	7.23	5.60	−22.5	3.52	11.52	+227.3
Stemmers, hand, female	4.21	4.91	+16.6	2.56	8.97	+250.4

[1] Not enough workers to justify the computation of an average.

Taking the data for all three States combined, the differential in the average hourly earnings of male floor workers for manufacturers' as compared with independent stemmeries increased from 12.1 cents in March 1933 to 14.7 cents in March 1935. This was due to the fact

that the gain in this occupation during the period amounted to only 7.5 cents in independent stemmeries, as against 10.1 cents in manufacturers' stemmeries. In the case of female floor workers, the rise in the differential was from 9.4 cents in 1933 to as much as 20 cents in 1935, the increase during the period amounting to only 5 cents in independent but 15.6 cents in manufacturers' stemmeries. For female pickers and searchers, the differential advanced from 10.4 cents in 1933 to 16.1 cents in 1935, following a gain of 4.5 cents in independent as compared with 10.2 cents in manufacturers' stemmeries.

With some exceptions, the same trend appeared in the above occupational groups in each of the three States, the increases in differentials between independent and manufacturers' stemmeries from March 1933 to March 1935 being smallest in Kentucky and North Carolina and largest in Virginia.

Average weekly hours.—The average weekly hours during each period were considerably greater in independent than in manufacturers' stemmeries. Furthermore, the trend in average hours per week was found to be in the opposite direction from average hourly earnings. Thus, the absolute reduction in average weekly hours between March 1933 and March 1935 was greater in independent than in manufacturers' stemmeries, which decreased the differential between the two types of stemmeries.

With respect to each of the occupations for all three States combined, the differential in the average hours per week of male floor workers for independent as against manufacturers' stemmeries was reduced from 13.7 hours in March 1933 to 10.0 hours in March 1935. This was caused by a drop during the period of 5.3 hours in independent stemmeries, as compared with one of only 1.6 hours in manufacturers' stemmeries. As regards female floor workers, the differential declined from 22.9 hours in 1933 to 21.5 hours in 1935, the slight reduction being caused by a decrease of 6.1 hours in independent and 4.7 hours in manufacturers' stemmeries. The differential for female pickers and searchers declined from 13.2 hours in 1933 to 7.8 hours in 1935, due to the reduction of 7.0 hours in independent and only 1.6 hours in manufacturers' stemmeries.

Average weekly earnings.—In the five occupational groups for which data on average weekly earnings are available the changes between March 1933 and March 1935 in the two types of stemmeries were very similar to those observed in connection with average hourly earnings. Thus, during each period the average earnings per week in manufacturers' stemmeries were larger than those found in independent stemmeries. Moreover, the absolute increases in weekly earnings between March 1933 and March 1935 were also greater in the former as compared with the latter. As a result, there occurred increased differentials in manufacturers' over independent stemmeries in March 1935 as against March 1933.

The gains in differentials were, in fact, even more conspicuous for average weekly earnings than for average earnings per hour. With respect to male and female floor workers and female pickers and searchers, there is an obvious explanation for this. Thus, the absolute increases in average hourly earnings between March 1933 and March 1935 in each of these occupations were much greater in manufacturers' than in independent stemmeries, while the accompanying reductions in average hours per week were larger in the independent than in the manufacturers' stemmeries. Whether the same explanation applies to male and female hand stemmers cannot be ascertained, as no data covering average weekly hours and average hourly earnings are available for these occupations.

Taking each of the occupations for all three States combined, the differential in average weekly earnings for manufacturers' as compared with independent stemmeries increased between March 1933 and March 1935 from $2.43 to $2.90 for male floor workers, from 73 cents to $1.74 for female floor workers, from $2.48 to $4.33 for female pickers and searchers, from 35 cents to $7.66 for male hand stemmers, and from 66 cents to $5.66 for female hand stemmers. During this period, the gains in average earnings per week in manufacturers' stemmeries amounted to $3.07 for male floor workers, $2.71 for female floor workers, $3.07 for female pickers and searchers, $7.28 for male hand stemmers, and $6.18 for female hand stemmers, which may be compared with increases in independent stemmeries of $2.60 for male floor workers, $1.70 for female floor workers, $1.22 for female pickers and searchers, and $1.18 for female hand stemmers. The average weekly earnings of male hand stemmers dropped slightly between 1933 and 1935.

With minor exceptions, the same trend appeared in the above occupations in each of the individual States.

Changes in Earnings and Hours in Independent Stemmeries Between March 1935 and September 1935

FIGURES covering all employees except hand stemmers for North Carolina and Virginia combined, given in table 8, show no change in average hourly earnings between March and September 1935. There were some minor changes, however, in the case of each State, the most important being an increase of 2.4 percent for females in North Carolina and a decrease of 2.7 percent for females in Virginia.

The gain in average hours per week for all workers except hand stemmers in both States combined was from 45.2 in March 1935 to 47.1 in September 1935, or 4.2 percent. The advance was more conspicuous in the case of males than females. The gains in hours were largely confined to North Carolina, with substantial increases reported for both males and females. In Virginia, the hours of male

workers showed a slight increase, while those of female employees dropped to some extent.

Table 8.—Average Hourly Earnings, Weekly Hours, and Weekly Earnings of Employees in Independent Stemmeries, March and September 1935

State, and sex of employees	All employees, excluding hand stemmers									All employees, including hand stemmers: Average weekly earnings		
	Average hourly earnings			Average weekly hours			Average weekly earnings					
	Mar. 1935	Sept. 1935	Percent of change	Mar. 1935	Sept. 1935	Percent of change	Mar. 1935	Sept. 1935	Percent of change	Mar. 1935	Sept. 1935	Percent of change
Both States	$0.180	$0.180	0.0	45.2	47.1	+4.2	$8.13	$8.50	+4.6	$6.58	$6.92	+5.2
Males	.225	.225	.0	47.3	50.3	+6.3	10.66	11.32	+6.2	9.43	10.01	+6.2
Females	.138	.138	.0	43.4	44.4	+2.3	5.97	6.14	+2.8	5.48	5.55	+1.3
North Carolina	.174	.177	+1.7	41.6	45.0	+8.2	7.22	7.95	+10.1	6.45	6.49	+.6
Males	.221	.220	−.5	44.2	48.8	+10.4	9.76	10.74	+10.0	9.76	10.66	+9.2
Females	.126	.129	+2.4	39.2	41.6	+6.1	4.93	5.37	+8.9	5.22	5.04	−3.4
Virginia	.186	.184	−1.1	49.7	49.2	−1.0	9.26	9.03	−2.5	6.68	7.29	+9.1
Males	.231	.229	−.9	51.4	52.1	+1.4	11.85	11.95	+.8	9.22	9.61	+4.2
Females	.149	.145	−2.7	48.3	47.0	−2.7	7.19	6.82	−5.1	5.67	6.03	+6.3

As regards average earnings per week, it is again possible to present two sets of figures, one covering all employees except hand stemmers, and the other all employees including hand stemmers.

With respect to all employees, excluding hand stemmers, although there were no changes in average hourly earnings, the gain in average weekly hours was responsible for a small increase in average weekly earnings. This increase for all employees in both States combined was from $8.13 in March 1935 to $8.50 in September 1935. The rise was larger for males than for females. As in the case of average hours per week, the gains were largely confined to North Carolina. In Virginia, the average weekly earnings advanced slightly only in the case of males, the females showing a small reduction.

Similar gains appear in the case of all employees, including hand stemmers. Thus, the average earnings per week of all employees for both States combined increased from $6.58 in March 1935 to $6.92 in September 1935, with the gain again larger for males than for females. As regards the data for each State, the gains were most notable in the case of males in North Carolina and both sexes in Virginia. Earnings of females in North Carolina showed a slight reduction between the two periods.

Earnings and Hours in Independent Stemmeries in September 1935

THE data for independent stemmeries in September 1935, although limited to North Carolina and Virginia, cover average hourly earnings, weekly hours, and weekly earnings for all employees, including hand stemmers, thus presenting a complete picture of this branch of the industry.

Average hourly earnings.—As already mentioned, the average hourly earnings of all employees in independent stemmeries were 16 cents[4] in September 1935. Nearly two-thirds of these workers, however, received under that figure, as may be seen from the distribution in table 9. The extent of low earnings is shown by the fact that 8.9 percent were paid under 10 cents per hour, 19.5 percent under 12 cents, 46.1 percent under 14 cents, and 65.2 percent under 16 cents. Among those earning the general average and above (34.8 percent of the total), 23.9 percent received 20 cents and over, 7.1 percent 24 cents and over, and only 0.5 percent 28 cents and over.

Table 9.—Distribution of Employees in Independent Stemmeries by Average Hourly Earnings, Weekly Hours, and Weekly Earnings, September 1935

Earnings or hours class	Total			Males			Females		
	Number of employees	Percentage		Number of employees	Percentage		Number of employees	Percentage	
		Simple	Cumulative		Simple	Cumulative		Simple	Cumulative
Average hourly earnings									
Under 6 cents	17	0.4	0.4	2	0.2	0.2	15	0.5	0.5
6 and under 8 cents	94	2.3	2.7	11	.8	1.0	83	3.0	3.5
8 and under 10 cents	253	6.2	8.9	35	2.8	3.8	218	7.7	11.2
10 and under 12 cents	431	10.6	19.5	46	3.7	7.5	385	13.6	24.8
12 and under 14 cents	1,087	26.6	46.1	58	4.6	12.1	1,029	36.5	61.3
14 and under 16 cents	783	19.1	65.2	95	7.5	19.6	688	24.3	85.6
16 and under 18 cents	324	8.0	73.2	113	8.9	28.5	211	7.5	93.1
18 and under 20 cents	120	2.9	76.1	35	2.8	31.3	85	3.0	96.1
20 and under 22 cents	388	9.5	85.6	320	25.4	56.7	68	2.4	98.5
22 and under 24 cents	296	7.3	92.9	264	20.9	77.6	32	1.1	99.6
24 and under 26 cents	238	5.8	98.7	230	18.3	95.9	8	.3	99.9
26 and under 28 cents	33	.8	99.5	32	2.5	98.4	1	(1)	99.9
28 cents and over	21	.5	100.0	20	1.6	100.0	1	(1)	100.0
Total	4,085	100.0	-------	1,261	100.0	-------	2,824	100.0	-------
Weekly hours									
Under 8 hours	92	2.3	2.3	40	3.2	3.2	52	1.8	1.8
8 and under 16 hours	166	4.0	6.3	56	4.4	7.6	110	3.9	5.7
16 and under 24 hours	277	6.8	13.1	94	7.5	15.1	183	6.5	12.2
24 and under 32 hours	390	9.5	22.6	57	4.5	19.6	333	11.8	24.0
32 and under 40 hours	419	10.3	32.9	67	5.3	24.9	352	12.5	36.5
40 and under 48 hours	916	22.4	55.3	187	14.8	39.7	729	25.8	62.3
48 and under 56 hours	898	22.0	77.3	216	17.2	56.9	682	24.1	86.4
56 and under 64 hours	662	16.2	93.5	292	23.1	80.0	370	13.1	99.5
64 and under 72 hours	115	2.8	96.3	104	8.3	88.3	11	.4	99.9
72 and under 80 hours	133	3.3	99.6	131	10.4	98.7	2	.1	100.0
80 hours and over	17	.4	100.0	17	1.3	100.0	-------	-------	-------
Total	4,085	100.0	-------	1,261	100.0	-------	2,824	100.0	-------
Weekly earnings									
Under $2	250	6.1	6.1	79	6.3	6.3	171	6.1	6.1
$2 and under $3	229	5.6	11.7	58	4.6	10.9	171	6.0	12.1
$3 and under $4	468	11.5	23.2	54	4.2	15.1	414	14.7	26.8
$4 and under $5	460	11.2	34.4	54	4.3	19.4	406	14.3	41.1
$5 and under $6	445	10.9	45.3	60	4.8	24.2	385	13.7	54.8
$6 and under $7	522	12.8	58.1	74	5.9	30.1	448	15.8	70.6
$7 and under $8	498	12.2	70.3	48	3.8	33.9	450	16.0	86.6
$8 and under $9	295	7.2	77.5	62	4.9	38.8	233	8.2	94.8
$9 and under $10	158	3.9	81.4	76	6.0	44.8	82	2.9	97.7
$10 and uuder $12	287	7.0	88.4	245	19.4	64.2	42	1.5	99.2
$12 and under $14	196	4.8	93.2	175	13.9	78.1	21	.7	99.9
$14 and under $16	148	3.6	96.8	148	11.7	89.8	-------	-------	99.9
$16 and under $20	102	2.5	99.3	101	8.1	97.9	1	.1	100.0
$20 and over	27	.7	100.0	27	2.1	100.0	-------	-------	-------
Total	4,085	100.0	-------	1,261	100.0	-------	2,824	100.0	-------

[1] Less than 1/10 of 1 percent.

[4] This figure is lower than in March 1935, due to the inclusion of the low-paid hand stemmers.

Male workers averaged 20.7 cents per hour. According to the distribution, 31.3 percent of them earned less than 20 cents. The great majority of the male employees, namely 64.6 percent, were found in the classes of 20 and less than 26 cents, thus leaving only 4.1 percent paid 26 cents and above.

The average hourly earnings of female employees amounted to 13.5 cents. An examination of the distribution shows that 24.8 percent earned under 12 cents, 61.3 percent under 14 cents, and 85.6 percent under 16 cents. Those paid 16 and under 20 cents amounted to 10.5 percent, which leaves only 3.9 percent in the classes of 20 cents and over. Hardly any female workers earned more than 26 cents per hour.

A comparison of the above data brings out clearly the wide differential enjoyed by male as compared with female employees. The extent to which this differential varied in the several occupations may be seen from table 10.

Table 10.—Average Hourly Earnings, Weekly Hours, and Weekly Earnings, by Occupation, in Independent Stemmeries, September 1935

Occupation and sex	Average hourly earnings			Average weekly hours			Average weekly earnings		
	Both States	North Carolina	Virginia	Both States	North Carolina	Virginia	Both States	North Carolina	Virginia
All occupations	$0.160	$0.154	$0.164	43.4	42.2	44.4	$6.92	$6.49	$7.29
Males	.207	.220	.199	48.4	48.6	48.2	10.01	10.66	9.61
Females	.135	.126	.143	41.1	40.0	42.2	5.55	5.04	6.03
Floor workers, male	.220	.217	.223	49.2	47.9	50.9	10.82	10.41	11.34
Floor workers, female	.145	.144	.146	45.6	48.9	43.8	6.61	7.03	6.39
Pickers and searchers, female	.135	.125	.147	39.8	36.5	44.2	5.39	4.58	6.48
Stemmers, hand, male	.151	(1)	.152	43.1	(1)	43.3	6.51	(1)	6.56
Stemmers, hand, female	.132	.124	.141	39.1	39.2	39.1	5.17	4.85	5.50
Miscellaneous workers, male	.244	.237	.248	55.1	54.3	55.5	13.42	12.85	13.75
Miscellaneous workers, female	.138	.128	.144	46.9	43.9	49.2	6.45	5.64	7.09

[1] Not enough workers to justify the computation of an average.

In the case of male floor workers, the average earnings amounted to 22 cents per hour. Of this group, 10.9 percent earned under 20 cents, 64.3 percent 20 and under 24 cents, 24.5 percent 24 and under 28 cents, and only 0.3 percent 28 cents and over. The average for female floor workers, however, amounted to only 14.5 cents per hour. Among these employees, 11.8 percent received under 14 cents, 81.6 percent 14 and under 16 cents, and 6.6 percent 16 and under 18 cents; none received as much as 18 cents. While the duties of male and female floor workers are not strictly comparable, the former being engaged in heavier work than the latter, it is nevertheless striking to see such a wide difference in the two wage levels.

Only a few male pickers and searchers were reported in this survey, so that figures can be shown only for the females found in the occupa-

tion. The average hourly earnings of female pickers and searchers was 13.5 cents. Of these workers, 4.0 percent earned 10 and less than 12 cents per hour, 58.6 percent 12 and less than 14 cents, 32.8 percent 14 and less than 16 cents, and 4.6 percent 16 and less than 18 cents, with no employees paid 18 cents and above.

In the case of hand stemmers, however, the wage levels of the two sexes were more alike, the hourly averages being 15.1 cents for males and 13.2 cents for females. With respect to male hand stemmers, 26.8 percent earned under 12 cents, 39.0 percent 12 and under 16 cents, 24.4 percent 16 and under 20 cents, 8.1 percent 20 and under 24 cents, and 1.7 percent 24 cents and over. In the female group, 39.4 percent received under 12 cents, 42.9 percent 12 and under 16 cents, 14.3 percent 16 and under 20 cents, 2.8 percent 20 and under 24 cents, and only 0.6 percent 24 cents and over. This advantage in the wage level in favor of male as compared with female employees is notable, especially since both groups are engaged in exactly the same type of work. Some employers explain this phenomenon by the fact that females are more conscientious in cutting out the full stem from the tobacco leaves, and, as in most instances the earnings are based on the amount of tobacco leaf stemmed, they would naturally have earnings slightly lower than those of males.

As regards the miscellaneous workers, the males averaged 24.4 cents and the females 13.8 cents per hour. In the male group, there were only 0.6 percent receiving less than 12 cents, 1.8 percent 12 and less than 16 cents, 44.1 percent 20 and less than 24 cents, 44.7 percent 24 and less than 28 cents, and 8.8 percent 28 cents and over. In the female group, on the other hand, 87.7 percent earned less than 16 cents, 3.7 percent 16 and less than 20 cents, and 8.6 percent 20 and less than 24 cents. The comparison between the wage levels of the two sexes here is not entirely valid, however, as the occupations covered differ considerably in each case.

An analysis of the data on a geographical basis shows that on the whole the average hourly earnings were somewhat higher in Virginia than in North Carolina. Thus, for all employees combined, the figure amounted to 16.4 cents in Virginia, as against 15.4 cents in North Carolina. Male workers earned slightly more in North Carolina than in Virginia, but the opposite was true with respect to female workers. As regards the various occupations, the average earnings per hour in Virginia were slightly higher than those in North Carolina in every case.

Weekly hours.—The average weekly hours of all employees in independent stemmeries were 43.4 in September 1935. This figure, however, does not tell the full story with respect to the long hours of work prevailing in these establishments. Many of the employees worked on a part-time basis during the week in question, thus tending to

reduce the general average considerably. According to the distribution in table 9, there were 32.9 percent working under 40 hours, most of these being part-time employees. The number working 40 and under 48 hours amounted to 22.4 percent. The extent to which long hours of work existed in this industry may be seen from the fact that 22.0 percent were employed 48 and under 56 hours, 16.2 percent 56 and under 64 hours, and 6.5 percent 64 hours and over.

The longest hours were worked by male employees, as may be seen from the fact that their weekly hours averaged 48.4. Those working less than 40 hours formed 24.9 percent of the total, with another 14.8 percent employed 40 and less than 48 hours. On the other hand, 17.2 percent worked 48 and less than 56 hours, 23.1 percent 56 and less than 64 hours, and 20.0 percent 64 hours and over.

The working hours per week of all female employees averaged 41.1. A considerably larger proportion of this group, namely 36.5 percent, worked under 40 hours, which is probably due to the fact that a number of females combined work in the plants with their duties at home. The workers employed 40 and under 48 hours amounted to 25.8 percent, with 24.1 percent working 48 and under 56 hours, 13.1 percent 56 and under 64 hours, and 0.5 percent 64 hours and over.

The fact that males worked longer hours than females is also shown by the data on weekly hours for individual occupations. (Table 10.)

The average weekly hours of all workers in Virginia were 44.4, which may be compared with 42.2 in North Carolina. The differential of 2.2 hours between the two States is due entirely to a similar differential among the more numerous female workers, as the male employees in North Carolina worked slightly longer hours than those in Virginia. Among the individual occupations working longer hours in Virginia than in North Carolina were male floor workers, female pickers and searchers, and both male and female miscellaneous workers. On the other hand, female floor workers and female hand stemmers worked longer hours in North Carolina as compared with Virginia, there being no comparable figures available for male hand stemmers. Contrasting male and female workers as a whole, as well as in every occupation in each State, it is found that in every case, except floor workers in North Carolina, the former were employed longer hours than the latter.

Weekly earnings.[5]—With an average of only 16 cents per hour, in spite of the relatively long hours of work, the average weekly earnings of all employees in independent stemmeries amounted to only $6.92 in September 1935. The extremely low weekly earnings prevailing in these plants is strikingly apparent in the distribution shown in table 9. Thus, 23.2 percent received under $4, 70.3 percent

[5] In considering the weekly earnings, it should be remembered that some of the establishments covered in September 1935 operated only during the fall months.

under $8, and 88.4 percent under $12. The number paid $12 and under $16 amounted to 8.4 percent, while only 3.2 percent earned $16 and over.

The average earnings per week of male employees was $10.01. Of these workers, 15.1 percent earned less than $4, 33.9 percent less than $8, and 64.2 percent less than $12. The number paid $12 and less than $16 formed 25.6 percent of the total, with 10.2 percent paid $16 and over.

Female employees averaged only $5.55 per week in September 1935, or only a little better than half of the amount earned by male workers. The extremely low earnings found among female employees is seen by the fact that 26.8 percent received under $4, 54.8 percent under $6, and 86.6 percent under $8. Those paid $8 and under $12 amounted to 12.6 percent, thus leaving only 0.8 percent earning $12 and over.

Male workers in North Carolina averaged more per week than those in Virginia. The opposite was true in the case of females, however, and as these constituted the majority of the employees, the average weekly earnings in Virginia were somewhat greater than in North Carolina. Among the various occupations, with the exception of female floor workers, all had higher average earnings per week in Virginia than in North Carolina.

EMPLOYMENT CONDITIONS

Unemployment in Selected Industries in Michigan, 1935

THE relative incidence of unemployment among workers attached to various industries may be shown by the ratio of unemployed workers to the total number of workers who are engaged or usually engaged in the individual industries, as revealed by the returns of the January 14, 1935, Michigan census of population and unemployment.[1] According to this census 233,731 or 14.4 percent of the gainful workers in Michigan who could be classified by their ordinary or present industry were unemployed.[2] The percentage of male gainful workers unemployed was 15.4 as compared with 9.7 percent of the females. The proportion of unemployed workers in the manufacturing and mechanical industries was 15.3 percent, a little above the average for all industries; this was the result of the widespread unemployment among building and construction workers. In agriculture, trade, public service, and domestic and personal service, the ratio of unemployment was below the average for the State, and among professional and semiprofessional workers only 6 percent were unemployed. Over a third (34.6 percent) of the workers classified under "extraction of minerals", a third (33.1 percent) of the forestry and fishing group, and almost a fourth (23.5 percent) of those who reported in the transportation and communication group were unemployed, as disclosed in the following table:

[1] Michigan. Emergency Welfare Relief Commission. Industrial classification of unemployed and gainfully employed workers. Lansing, 1936. (Michigan Census of Population and Unemployment, Employment and Unemployment Statistics [preliminary], first series, no. 3.)

For article on Michigan Population and Unemployment Census, 1935, giving data on employment status by sex, age, and type of community, see Monthly Labor Review, Washington, November 1936 (pp. 1157-1161).

[2] Does not include unpaid family workers or persons not working due to illness, injury, or industrial disputes.

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Percent Unemployed in Selected Industries in Michigan, Jan. 14, 1935

Industry	Percent unemployed			Industry	Percent unemployed		
	Total	Male	Female		Total	Male	Female
Total—Industry ascertained	14.4	15.4	9.7	Transportation and communication	23.5	24.9	7.3
Agriculture	12.6	12.8	6.5	Construction and maintenance of streets	49.0	49.0	(2)
Forestry and fishing	33.1	33.3	[1] 19.8	Steam and street railroads	14.1	14.2	10.4
Extraction of minerals	34.6	34.9	15.8	Truck, transfer, and cab companies	16.8	17.1	6.1
Manufacturing and mechanical industries—	15.3	15.9	10.5	Other	15.1	17.3	6.6
Building and construction	45.4	45.6	27.6	Trade	11.1	11.2	10.6
Chemical and allied industries	8.6	9.1	5.2	Wholesale and retail	11.7	11.7	11.7
Food and allied industries	16.3	15.8	18.8	Banking, brokerage, insurance, and real estate	8.0	8.2	7.6
Iron, steel, machinery, and vehicle industries	13.1	13.3	9.7	Other	9.7	11.0	7.2
Automobile factories	13.2	13.4	9.9	Public service (not elsewhere classified)	11.7	12.2	8.9
Other	12.7	13.0	9.0	Professional and semiprofessional service	6.0	7.6	4.3
Lumber and furniture industries	20.1	21.0	9.8	Domestic and personal service	12.7	13.9	12.1
Paper, printing, and allied industries	9.6	9.5	10.5	Hotels, restaurants, etc.[3]	12.9	15.0	10.7
Other manufacturing	11.9	12.7	9.7	Domestic and personal service (n. e. c.)	12.6	12.3	12.7

[1] Base figure less than 500 and more than 200.
[2] Base figure less than 200.
[3] Includes boarding houses, laundries, cleaning, dyeing, and pressing shops.

Employment in Building Construction and Related Industries in Great Britain, 1932–35[1]

IN 1935 the building-construction industry of Great Britain employed more workers than any other single industry. The number of insured building-trades workers between 16 and 64 years of age in July 1935 was 976,800, of whom 837,200 were actually employed. In the construction industry as a whole, including public-works contracting and constructional engineering, the number of insured workers was 1,287,600 in July 1935, and of these 1,017,100 were employed. Between 1932 and 1935 employment in building construction increased 35 percent and unemployment decreased 40.9 percent. Public-works contracting, on the other hand, employed fewer workers in 1935 than in 1932, and unemployment increased 8.8 percent in that period.

The increase in the number of building-trades workers employed between 1932, the low point of the depression in Great Britain, and 1935, after the revival in building activity and the development of housing and slum-clearance programs, is shown in table 1.

The Building Industries National Council in its yearbook for 1936 points to the economic importance of the construction industry from two viewpoints—the fact that it provides employment for males and the heads of families, and the amount of industrial activity which directly and indirectly follows upon increased building.

[1] Data are from Building Industries National Council Yearbook for 1936, London, 1936.

Table 1.—Number of Building-Trades Workers Employed in Great Britain in July 1932–35, by Occupation

Occupation	1932	1933	1934	1935
Carpenters	101,100	117,300	124,800	130,600
Bricklayers	61,400	76,800	82,500	86,100
Masons	17,600	18,500	19,700	21,300
Slaters	4,900	6,500	6,700	7,600
Plasterers	20,200	26,200	28,200	29,900
Painters	82,800	93,500	104,100	112,300
Plumbers	27,800	31,700	34,000	35,000
Laborers	172,800	196,000	205,100	244,500
Others	132,700	139,200	171,500	180,100
Total	620,400	705,700	776,600	837,200

Coal mining, the second largest man-employing industry, employs only about 65 percent as many male workers as construction; in fact, the number of men directly employed in the construction industry exceeds by more than 70,000 the number employed in the leading export industries, coal mining, textile manufacture, and shipbuilding.

Taking an average wage of rather less than £3 per week, purchasing power is being distributed through those directly employed in the constructional industries at the rate of £150 millions a year. In this connection it must be remembered that, those employed in these industries being overwhelmingly males, a large proportion is composed of heads of families. The bulk of the purchasing power distributed in wages to those directly employed in the constructional industries is therefore spent over the counters of retail shops throughout the country.

The extent of employment in related industries growing directly and indirectly out of the expansion of the building industry is indicated in tables 2 and 3. Table 2 deals with building materials and equipment, which respond directly, while table 3 goes somewhat farther afield and undertakes to estimate the effects of building, particularly housing, on employment in such indirectly related industries as those dealing with electrical equipment and housefurnishings, and in public utilities furnishing gas, water, and electricity.

Table 2.—Number of Insured Workers, Employed and Unemployed, in Industries Directly Dependent Upon Construction Industry, in July 1932–35

Industry	1932		1933		1934		1935	
	Employed	Unemployed	Employed	Unemployed	Employed	Unemployed	Employed	Unemployed
Stone quarrying and mining	35,300	11,100	35,300	11,400	37,700	9,000	38,600	7,900
Slate quarrying and mining	8,800	1,400	9,100	1,000	9,400	600	9,400	700
Clay, sand, and gravel	11,800	4,800	13,300	3,200	14,500	2,500	15,700	2,000
Artificial stone and concrete	16,100	5,800	17,100	5,200	18,300	4,400	20,000	4,200
Cement, lime, and whiting	12,700	4,000	12,400	3,100	13,400	1,900	13,800	1,400
Brick and tile	69,400	18,300	77,100	12,600	85,200	10,400	91,200	9,600
Iron and steel tubes	15,500	13,000	18,700	9,400	23,600	5,900	24,500	6,100
Stove and general iron founding	65,100	27,500	72,400	19,200	80,900	12,700	81,800	11,600
Heating and ventilating apparatus	7,500	2,100	8,300	1,600	10,500	1,100	11,800	1,100
Electrical wiring and contracting	19,900	5,200	22,400	5,200	28,100	5,300	29,900	5,500
Sawmills, sash and door, etc	46,800	12,300	48,100	10,300	52,600	9,100	53,200	8,400
Paint and varnish	18,000	2,100	19,400	1,700	21,200	1,300	22,500	1,300
Wallpaper	5,300	600	5,600	600	6,900	400	6,700	400
Total	332,200	108,200	359,200	84,500	402,300	64,600	419,100	60,200

Table 3.—Number of Insured Workers Employed and Unemployed in Great Britain in Building Construction and Related Industries, in July 1932–35

Industry group	1932		1933		1934		1935	
	Employed	Unemployed	Employed	Unemployed	Employed	Unemployed	Employed	Unemployed
Construction industries [1]	814,900	361,700	878,200	312,400	951,200	280,500	1,017,100	270,500
Directly dependent industries [2]	332,200	108,200	359,200	84,500	402,300	64,600	419,100	60,200
Partly dependent industries [3]	169,700	67,700	188,800	50,600	201,000	38,300	207,700	35,900
Industries indirectly affected [4]	636,500	190,100	682,100	157,000	748,800	114,700	766,600	106,400
Total	1,953,300	727,700	2,108,300	604,500	2,302,800	498,100	2,410,500	473,000
Total number of insured workers	2,681,000		2,712,800		2,800,900		2,883,500	

[1] Building, repair, public works, etc.
[2] See table 2 for industries included in this group.
[3] Manufacture and remanufacture of brass, copper, zinc, tin, lead, etc.; bolts, nails, screws, etc., wire, wire netting, and wire rope, woodwork not otherwise classified, glass, pottery, and earthenware.
[4] Electrical engineering, electric apparatus, lamps, etc., iron and steel, hand tools, cutlery, saws, files, etc., furniture, carpets, linoleum, oilcloth, etc., rubber, gas, water, and electricity.

The number of houses built in England and Wales during the year ending September 30, 1935, was 316,400, which was 56.6 percent greater than the number erected in the year October 1, 1931, to September 30, 1932. Housing has been the main factor in accelerating building in Great Britain. Dwelling houses represented 68.6 percent of the total estimated cost of buildings for which plans were approved in 146 provincial towns during the first 10 months of 1935, as compared to 70.8 percent in the same period in 1932, 74.1 percent in 1933, and 72.4 percent in 1934. The value of residential building has increased steadily, however, and in 1935 was 72.6 percent greater than in 1932.

TENANCY IN AGRICULTURE

Report of President's Committee on Farm Tenancy

OWING to the increase in farm tenancy, the decrease in farm ownership, and the insecurity of those who still hold their farms but with only small equities, the President's Committee on Farm Tenancy believes that the time has come when action must be taken to protect the resources of man-power, natural resources, and investment in agriculture.[1] The Committee is of the opinion that responsibility rests with both the State governments and the Federal Government and that a start should be made on a small scale, expanding the scope as experience points the way and personnel is trained.

Investigation shows that the situation of the farmer has become increasingly insecure. Fluctuation in prices of agricultural commodities, excessive mobility of farmers, speculation, and exploitation of the soil, associated with faulty systems of land tenure, have all contributed to this situation. Farm ownership has been regarded throughout the history of the United States as a means of attaining security. However, for the past 55 years the proportion of operating owners in relation to tenants has declined. The tenant farmers increased from 25 percent of all farmers in 1880 to 42 percent of the total in 1935. Moreover, among owners it is estimated that many have equities of little more than one-fifth. The Committee concludes that one farm family out of four is in a precarious situation socially and economically.

The tenancy system contributes to the unsatisfactory farm situation. About two-thirds of the tenants and sharecroppers are located in the South, and in that area two-thirds of this class of labor are white and one-third are Negroes. Southern sharecroppers operate 716,000 farms, which represent 10 percent of all farms in the United States. These sharecroppers, working principally in the cotton and tobacco belts, constitute 48 percent of the total of sharecroppers and farm laborers combined, and 39 percent of all southern tenants.[2] Since sharecroppers supply only their labor they are usually the most insecure class of tenants.

[1] National Resources Committee. Report of the President's Committee on Farm Tenancy, Findings and Recommendations. Washington, 1937.

[2] For the purposes of this report the term "tenant" includes both the sharecroppers and the group commonly known as tenants.

Farm laborers, which class made up one-fourth of all persons gainfully employed in agriculture in 1930, are most secure when paid by the month on a yearly contract and living on the farms of their employers. The Committee believes that the great majority of hired farm laborers are dependent on irregular employment and that even those who have succeeded in becoming tenants or owners often become migratory workers in depression periods. In addition to these categories of the insecure, attention is directed to families on submarginal land or on holdings of inadequate size, to those hopelessly in debt, and to young persons in the farm population who are unable to obtain farms.

The descent of agricultural workers from one class of tenure to a lower status and the growing difficulty in rising to a higher status have been associated with the general economic depression of recent years. In addition, problems inherent in the agricultural situation, such as the land-tenure and credit system, require correction. It is also necessary that a proper balance be maintained between agriculture and other elements in national life.

To prevent wastage of lands through erosion of soils and thus preserve national resources, the condition of farm labor must be ameliorated. The report states: "Tenancy has contributed to soil depletion; soil depletion has in turn contributed materially to the expansion of tenancy and the further impoverishment of tenants and croppers."

Numbers of farm tenants are moving from farm to farm each year. One-fifth to one-fourth of the farm population lives in extreme poverty in two- or three-room houses of poor construction. Many of these families are chronically undernourished and subject to pellagra, malaria, and hookworm. They are often without suitable medical care and scantily clad. To convert tenants into farm owners will not remedy these conditions, and the Committee therefore recommends far-reaching reforms.

The Federal program, it is believed, should facilitate farm-home ownership and help existing owners to keep their farms. It should further improve the condition of laborers, aid families stranded on submarginal land, take such land out of cultivation, and discourage speculation in farm land. As no agency with adequate powers to correct conditions has attacked these problems, the Committee regards it as highly important that there be unified and well-integrated leadership. Regular appropriations by Congress for this work are recommended, the work to be expanded as the wisdom of the new policy is demonstrated.

For States, the Committee recommends measures to improve lease contracts and landlord-tenant relationships, modification of the system of taxation on farm lands, and the safeguarding of the civil liberties of tenants. The report states that although it is believed the Federal

Government "can do much to improve conditions of tenant farmers, some of the most fruitful fields of endeavor are under the jurisdiction of State agencies." In connection with taxation of farm lands, a differential is recommended favoring family size, owner-operated farms. A policy of complete or partial tax exemption of small homesteads has been favored in various parts of the country in recent years and at least seven States have already adopted the principle.

Condition of Tenant Farmers on Cotton Plantations

INCREASED farm tenancy, especially of white tenants, has been the most striking trend of southern farm life in the last 25 years, the Works Progress Administration concluded in a study of 646 plantations in the Eastern Cotton Belt.[1] For this investigation, plantations of medium and large size were chosen. A tract with five or more resident families, including the landlord, was defined as a plantation, and those with fewer families were not included. A high degree of concentration in land ownership is typical of plantation areas, and as a result tenants form a large proportion of the farm operators. Per-capita incomes in these areas are higher than those in other southern agricultural counties but lower than those in other farming sections of the country. Further characteristics of cotton-plantation districts are: "Small proportions of urban and village dwellers; scarcity of nonagricultural industries; large families; poor school facilities, especially for Negroes; and a highly mobile population, with families frequently on the move in search of better conditions." These families are almost entirely dependent upon the cotton crop for existence, and aside from feed raised for livestock and a limited amount of garden produce practically no other crop is grown.

As large numbers of workers are needed for the crop season, large families have been encouraged on plantations. The white birth rate in the southern rural areas has been higher than in other sections. This is equally true of the Negroes, but the high death rate among Negroes, especially among infants, has served to keep the natural increase lower than for whites. The authors of the report here reviewed conclude that the surplus labor supply has resulted in reducing the bargaining power of plantation tenants, thus making it increasingly difficult for them to break away from the plantation system and become independent farmers.

The closing of the industrial labor market as an effect of the depression resulted in bottling up the tenant group in the South. Prior to that period, excess labor totaling a quarter of a million persons yearly

[1] U. S. Works Progress Administration. Division of Social Research. Research Monograph V: Landlord and Tenant on the Cotton Plantation, by T. J. Woofter, Jr., and others. Washington, 1936.

migrated to urban centers. With the shutting off of this outlet, serious relief problems were encountered in rural southern areas.

Wage labor on plantations was accepted immediately after slavery was abolished. It was soon followed by sharecropping, a system under which the worker receives a fixed portion—usually half—of the crop for his labor. Sharecroppers now make up the bulk of the labor supply. Other plantations are worked by wage labor and by various types of tenants. Often two or more classes of tenants are found on the same plantation. In the sample studied, 71 percent were operated by families of mixed tenure, 16 percent by croppers, 4 percent by wage hands, 3 percent by other share tenants, and 6 percent by renters.

Incomes in the Cotton Belt are low, the average total net income per plantation in 1934 having been only $6,024. Adding A. A. A. benefits, the average for 1934 compared favorably with that for 1929. The average gross cash income of plantation operators was $5,095; their average net income was $2,572, of which about 10 percent was in home-consumed products. The net sum accruing to a landlord, was sufficient to return 6 percent on the investment and an average of about $850 for labor. Share tenants received only a small proportion of the plantation income. In 11 areas surveyed, the wage hands, croppers, share tenants, and renters on plantations received an average of only $309 per family in 1934 ($73 per capita). For wage labor the average per-family income was $180. Sharecroppers, the most numerous group, averaged $312 per family ($71 per capita). The cash renters averaged $354 per family.

The study under review states: "Fuel and house rent are part of the tenant's perquisites but the houses furnished are among the poorest in the Nation." Four-room, unpainted, and unscreened shacks predominate. Wells furnish the water supply for 80 percent of owners and tenants. Living is meager on the low income provided, and about one-third of this income is in products raised for home consumption, such as chickens, eggs, pork, sirup, corn meal, cowpeas, and sweetpotatoes. In general these foods are available only in the late summer and fall. During the months of crop cultivation the tenant expends another third of his income, at the rate of about $13 per month. This sum provides food, such as flour, lard, and salt pork, as well as kerosene, medicine, and articles of clothing the purchase of which cannot be postponed until fall when settlement is made for the crop year. The remaining one-third of income, paid when the settlement is made, provides clothing and incidentals and the tenant ordinarily begins the winter on "slim rations."

Obligatory purchase of goods at commissaries was reported for 15 percent of the plantations; on another 11 percent of the total this was optional. Where savings from wholesale buying were passed on to the purchaser this meant a saving, but otherwise it provided only an additional source of income to the operator.

Tenant farmers move often but not far. As the farmer becomes more successful he also becomes more stable. There is also a good deal of shifting from one kind of farm tenure to another and from open country to town and back again. Evidence indicates a greater stability of Negro than of white tenants. The report states that this is probably a result of the fact that there are fewer opportunities for Negroes outside agriculture and that they are more easily satisfied. White families in this sample lived on the same plantation an average of 4.8 years as compared with 6.1 years for Negroes. White sharecroppers averaged 4.4 years per farm, and Negroes 5.6 years.

The eastern cotton States had a relatively high rural-relief rate in 1933 as compared with other parts of the country. It did not rise to the same extent proportionately in later years, however. When the combined relief and rehabilitation rate was increasing in other areas in 1934 and 1935, the Cotton Belt had a lower combined monthly rate than other sections. The chief factor contributing to the lower relief rate in the South was the payment of benefits under the crop-control plan, bringing relative prosperity to those fortunate enough to have maintained their farm-operator status. The placing of unemployables under the care of county administrators and the weeding out of undeserving cases also served to reduce relief rolls.

COOPERATION

Report of President's Commission for Study of Cooperatives

THE cooperative movement was found by the Study Commission appointed by the President in the summer of 1936 to have become an established part of the business life of the nations of Europe. The Commission of six members [1] made a first-hand study, over a period lasting 2½ months, of cooperative associations in England, Scotland, Ireland, France, Switzerland, Czechoslovakia, Denmark, Norway, Sweden, and Finland. Its report [2] recently released to the press in advance of formal publication, consists mainly of factual material gathered by the Commission, but individual statements by various members of the Commission emphasize the important aspects of or lessons to be drawn from the movement, as they see it. The only recommendations made were submitted, not in the report itself, but in the letter transmitting the report to the President. These were as follows:

1. That there be made a survey of consumer and service cooperatives in the United States, using as far as possible the assistance and records of the Farm Credit Administration, the Bureau of Labor Statistics and other governmental agencies, to determine (*a*) the number, membership, classes of business, costs, and volume of business done by these organizations; (*b*) the major social and economic effects of cooperation here; (*c*) the conditions under which cooperatives develop.
2. That an agency be established or designated to give information, research and advisory service to consumers' cooperatives; this to be directly linked up with all of the Government's activities in behalf of the consumer.
3. That steps be taken to assure consumer cooperatives credit parity.

General Findings of Commission

FOLLOWING are excerpts from the Commission's general findings:

"Two things make the policy of cooperatives different from that of private business. In private business, in its usual corporate form, each share of stock has a vote. In a cooperative, each member has a

[1] The personnel of the Committee was as follows: Jacob Baker, Assistant Administrator, W. P. A.; Leland Olds, of the New York Port Authority; Charles. E. Stuart, Export-Import Bank; Robin Hood, Secretary of National Cooperative Council, Washington, D. C.; Clifford Gregory, editor, The Prairie Farmer; and Emily Cauthorn Bates, at one time educational director for Consumers Cooperative Association, Kansas City, Mo.

[2] Inquiry on Cooperative Enterprise. Report. Washington, 1937. 2 vols., 731 pp. (mimeographed).

vote, and only one, no matter how much stock he may own. (And the amount he may own is usually limited.) In private business the profits are distributed to the stockholders. In a cooperative the profits (after paying a small fixed interest to the shareholders and setting aside a percentage for reserves) are distributed to the members in proportion to their patronage.

"While cooperatives generally stick rather closely to the fundamental principles referred to, and while they all have as a fundamental purpose the saving of money for their members, they differ widely in some of their general aims and policies.

"English and Scotch consumer cooperatives look toward the ultimate abolition of private profit; to the establishment of a cooperative commonwealth in which all business will be done by consumer cooperatives, or divided between the cooperatives and the State—a set-up of society in which all national income (except for a small fixed return on capital) shall be paid to workers in wages and salaries, with all profits accruing to consumers in the form of lower prices.

"In Sweden an important aim of consumer cooperatives is to be a price yardstick; to do enough business to insure fair prices to consumers. Swedish cooperators believe that competition is better than even a cooperative monopoly. They desire to define the terms of competition by doing enough retailing and manufacturing to make price-fixing by private monopoly impossible. Monopoly, they say, can be controlled much more effectively by cooperative competition than by antitrust laws.

"Swiss consumer cooperators have much the same objective, except that it is confined more to the retail field. They do not desire to eliminate private enterprise. They do not consider it unholy. They are even in partnership with it in the business of meat slaughter and distribution.

"In many countries consumer cooperation is basically an urban workers' movement. In Denmark farmers make up the bulk of its membership. In Sweden, its worker membership is being supplemented by rapid additions from farmer and white-collar classes. In Finland there are two groups of consumer cooperatives, one composed chiefly of farmers, the other chiefly of urban workers. In Switzerland cooperation is less a class movement than in any other country, its membership being a cross-section of all classes.

"An outstanding cooperative accomplishment is the encouragement of thrift among a class of people who ordinarily save little. It is easier to save when sizable amounts of money are paid back regularly in patronage refunds. The prevailing cash purchase policy of cooperatives is a stimulus to thrift. Cooperative education in family buying and budgeting also helps. So does the fact that losses of savings deposited with cooperatives are almost unknown. The larger cooperatives have become great savings institutions.

"In England and Scotland particularly, members are urged to leave their patronage refunds with the cooperatives. After they have bought shares up to a maximum limit, further savings go into 'loan capital' at a lower rate of interest. In practice both loan capital and share capital can be withdrawn on demand. During the depression, cooperative shares were almost the only securities in Great Britain which did not depreciate in value.

"Chief consumer cooperative accomplishments in Europe are:

1. Reduction in costs of retailing with advantages accruing to consumer, thus making possible more saving and higher standards of living, and contributing to economic stability.
2. Promotion of thrift; increasing economic security of members.
3. Education in intelligent buying, family budgeting, and general economics.
4. Better citizenship, the result of widely-diffused ownership of an important democratic business enterprise.
5. Effective control of monopoly by cooperative competition.
6. Comparatively high labor standards.

"Among the important problems not yet fully solved by some or all European cooperatives are:

1. Securing a larger percentage of the trade of their members.
2. Inducing local societies to concentrate their buying more in cooperative wholesale societies.
3. Increasing democratic control by making it easier for their members to vote. (The old 'town meeting' voting method does not meet the requirement of large societies.)
4. Improving relations with farmers.
5. Meeting chain-store competition when (as in England) recent legislation has removed the cooperatives' tax exemption on surplus.
6. Holding their own in competition while maintaining trade-union standards.
7. Wise investment of growing surplus funds.
8. Finding out how to adopt the good practices of private business without the bad.

"Consumer cooperatives in Europe grew up during a period when private retailing was inefficient. They set new standards of efficiency, reduced costs, set standards of quality. Only recently have they faced much chain-store competition. It is too soon to forecast the results of this. It is causing cooperators some worry. In England chain-store business is growing more rapidly than that of the cooperatives. In Switzerland, cooperatives are holding their own in face of the keenest kind of chain-store competition.

"We saw amazing cooperative stores that were setting new standards in merchandizing; other cooperators discussing seriously the menace of the new multiple-shop (chain-store) invasion; still others that were adopting the good and the bad indiscriminately from private experience.

"Cooperatives keep down retail margins by low capital costs, large volume of trade, lower executive salaries, standardized goods, and

mass buying. In some countries favorable tax laws give them a competitive advantage.

"Consumer cooperatives as a rule pay higher than going wages to labor, require shorter hours, and are more liberal with vacations and sick leave. Cooperative stores in general pay workers 10 percent to 15 percent more than the going rate, and pension their old workers. Most cooperatives employ chiefly union workers, have collective agreements, and arbitration boards which handle the few labor disputes that arise. In general there is a close relationship between organized labor and consumer cooperatives.

"In all countries consumer cooperation has become an established part of the business life of the nation. Private business has not been ruined by this new competition. It has adjusted itself to cooperative competition and has learned some things from cooperatives to its benefit, just as cooperatives in turn have learned from private business.

"European governments in the countries we visited are generally friendly to cooperative enterprise. They regard it as a stabilizing influence. It creates a pride of ownership in cooperative members that makes them better and more intelligent citizens; gives them a more definite part in the nation's economic life, and experience in running their own business. Themselves members of a democratic organization, they become stronger supporters of democracy in government.

"Cooperatives have not received many special privileges from government. Some access to government credit, some exemption from taxes on plowed-back surpluses, some subsidy to cooperative education—that is about all.

"In most countries cooperatives are neutral in politics. In England and Scotland they contribute to the Labor Party and also support their own Cooperative Party. In Czechoslovakia the store managers are often party leaders and the stores centers of political propaganda.

"From the things we learned and the figures we gathered could be woven an Aladdin tale of cooperative success. From a different selection of material could be built a story of cooperative blunders and mistakes and class antagonism.

"It has been our task to try to tell the story fairly, to picture accurately a movement that has its full share of human errors, but that has brought new hope, new pride of ownership, higher standards of living, to a substantial portion of the people of western Europe.

"European data alone are of course insufficient for a determination of domestic policies. The applicability of European data to conditions in the United States is open to individual interpretation. What people may finally think about the future of the cooperative method will be linked with their views as to the economic, political, and social destinies of mankind."

Extent of Consumers' and Farmers' Cooperation Abroad

TABLES 1 and 2, taken from the report, show respectively the activities of the retail and wholesale consumers' associations and of the farmers' marketing and purchasing associations in 1935.

Table 1.—Extent of Consumers' Cooperative Enterprise in Specified Countries in 1935

Country	Population of country	Local consumers' cooperative societies					Wholesale societies: Amount of trade
		Membership [1]	Number	Trade		Value of goods produced	
				Amount [2]	Percent of national retail trade [3]		
Czechoslovakia	14,729,536	[4] 817,731	[4] 903	[4] $69,264,486	2.7	[4] $8,205,738	$39,480,000
Denmark	3,705,559	354,000	1,939	63,111,000	----------	11,205,135	40,336,953
Finland	3,762,026	517,763	532	73,076,586	25.0–30.0	13,631,538	41,637,794
France	41,228,000	[4] 2,540,290	[4] 2,908	[4] 233,544,330	12.0	3,183,378	50,265,402
Great Britain	46,082,000	7,483,976	1,118	1,080,545,492	12.0	354,442,375	573,137,384
Norway	2,817,124	138,557	497	31,906,200	----------	4,477,200	10,182,850
Sweden	6,211,566	568,161	624	103,716,950	10.0	26,337,265	44,895,945
Switzerland	4,066,400	[4] 402,535	[4] 585	[4] 94,299,933	10.0–12.0	21,408,462	57,573,187

[1] Although there is some duplication of membership, these figures in general may be taken as representing families.
[2] Not including trade in consumer goods by agricultural societies, shown in table 2.
[3] Estimated. Total national retail trade includes also goods not dealt in by cooperatives, such as building materials and automobiles. The cooperative percentage of trade in foodstuffs and other household goods is much higher than shown by these figures.
[4] 1934.

Table 2.—Extent of Farmers' Cooperative Enterprise in Specified Countries in 1935

Country	Rural population of country	Local farmers' cooperative societies					Central federations: Amount of trade
		Membership	Number	Trade			
				Purchasing for members [1]	Marketing for members	Total	
Czechoslovakia	7,687,864	597,079	5,376	[2] $29,248,273	[2] $58,496,550	[2] $87,744,823	[2] $71,990,352
Denmark	1,994,898	590,853	5,182	28,170,000	249,525,000	277,695,000	34,606,410
Finland	2,993,479	366,134	1,562	[3]	[3]	60,076,440	25,195,350
France	19,616,000	847,686	16,823	[3]	[3]	[3]	[3]
Great Britain	9,216,400	150,016	1,090	[3]	[3]	54,119,154	2,693,325
Norway	2,013,000	[2] 204,356	[2] 1,363	[3]	[3]	[2] 36,083,466	5,277,453
Sweden	2,484,626	[2] 395,474	[2] 1,541	[3]	[3]	[2] 54,412,800	15,250,626
Switzerland	2,828,624	[2] 362,927	[2] 6,136	[3]	[3]	[3]	21,324,324

[1] Includes consumers' goods as well as farm supplies. [2] 1934. [3] Figures incomplete or not available.

Cooperative Practice Relative to Share Capital [1]

IN A consumers' cooperative association the funds necessary for operation are usually contributed by the members, in the form of share capital or membership certificates. This practice is followed whether the members are individual persons or local associations.

[1] This article is based upon data accumulated for many years by the Bureau of Labor Statistics, and upon articles in the Nebraska Union Farmer (Omaha), issues of Feb. 10 and Mar. 10, 1937; Midland Cooperator (Minneapolis), February 1937; and Cooperative Consumer (Kansas City), Feb. 8, 1937.

Under the general practice the cooperative association pays a fixed, moderate rate of interest on this capital. The surplus "earnings" made through the activities of the association are returned to the members in proportion to their patronage. The theory back of these practices is that while capital is necessary to carry on the cooperative business, the lifeblood of the enterprise is not the member's capital but his patronage, and it is patronage therefore that should be rewarded. A few associations have even gone so far as to abolish the payment of all interest on capital, on the ground that the use of the member's capital is his contribution to the good of the organization. Such organizations often limit the share holdings to one share per member, so that each contributes an equal amount to the society.

Several variants of the recognized pattern have appeared from time to time.

One large association in the Middle West started operations as a collective-buying agency without any capital stock. Its present capital has been built up out of the savings made through its activities. Under its present policy, adopted after several years' operation, each member association is required to own 5 shares of common stock at $100 each, plus an additional share for each 50 members. The member's patronage refunds are applied to the purchase of these shares until these minimum requirements are met. Any surplus thereafter is retained for 5 years as preferred stock. At the end of that time the par value of the preferred stock is paid in cash to the member association. Thus a certain amount of the preferred stock (the delayed patronage refund) is returned each year. This system, called the "revolving fund" plan, has been adopted recently by several other large organizations. It has the advantage of providing a source of ready capital. One commentator, however, states that it may have disadvantages also; and he points out that 5 years is a long period over which to defer the return of patronage refunds and may make the saving too remote to appeal to the average member, and that the association assumes a definite obligation at the end of the 5-year period, during which time conditions may have so changed as to make the meeting of this obligation embarrassing, if not impossible.

Early in 1937 a local Nebraska association reorganized its entire capital structure. This was an old association which, although its paid-in share capital had never exceeded $2,900, had built up a net worth of some $25,000. Its recent annual meeting decided (1) to issue shares of $1 each, such shares to be nonassessable, nontransferable, nonredeemable, and without interest; (2) to redeem at par all of the old shares outstanding and to issue to each of the present members a new $1 share; and (3) to apply $1 of the patronage refunds of nonmembers to the purchase of a $1 share, so that all patrons will automatically become members. The organization expects by this method to bring into membership many persons in the community who would not in-

vest in a share at the old price. Such a procedure, of course, calls for greatly intensified educational work in cooperative principles and practices in order to make convinced cooperators of the new members.

A third plan, dubbed the "rotating-capital plan", is described in a recent issue of the Nebraska Union Farmer.[2] Under this system the patronage refunds due each year are paid that year, partly in cash and partly in new shares, the exact proportions being determined by the annual meeting. The amount of share capital desired for operation of the business is determined each year by the members, and the amount of reserve is limited to a definite proportion of the capital. Thus both the capital and the reserves fluctuate in amount according to the needs of the business. Any surpluses are used to retire old shares of stock in the order of their serial number or date of issue.

Several advantages are claimed for this method: (1) It results not only in adding new members, but also in eliminating the members who do not trade with the association. The older members who continue to patronize the association remain in membership by virtue of the new shares purchased through their patronage refunds. This plan insures that after a period of time the shares will all be held by the active members of the association. (2) It encourages loyal, active members, for only by patronage can the individual continue in membership. (3) It eliminates the person who is interested in his cooperative membership only because it is a good investment, for if he does not utilize the services of the organization he will eventually find his investment returned to him. As the article in question states, the plan "works like this: No patronage, no refund; no refund, no new shares; with no new shares, and the old shares retired, no membership; result—only loyal patrons remain."

> Many cooperators are advocating the complete elimination of interest to capital. This, it appears, would be as unsound and unfair a practice as the payment of too high a rate. The use of capital does have a value. That value results from the sacrifice of those who have created and conserved capital. * * *
>
> Cooperationists do not seek to confiscate or destroy capital, but only to operate a system that is just and fair to every interest concerned, including those who furnish the capital. * * *
>
> Leaving the matter of determining the amount of working capital each year with the shareholders at their annual meeting will, I believe, have a tendency to guard against overexpansion by ambitious managers or boards, and hold them within the limits of their capabilities. Lowering the amount of outstanding capital whenever advisable will likewise lower the amount of interest expense, and make the savings larger. * * *
>
> The rotating-capital plan would tend to keep each member's capital investment in the cooperative in proportion to the amount of his business. This means that each would finance his own service. The member whose patronage is small would accumulate fewer shares than the one whose business is larger. This would be fair and just to all.[2]

[2] Nebraska Union Farmer (Omaha, Nebr.), Mar. 10, 1937, p. 8.

HOUSING CONDITIONS

Labor and Social Effects of Migration by Trailer

THAT the growing use of automobile-trailer dwellings makes it necessary for State and local governments to provide new regulatory codes and revise codes already existing, to protect the welfare and health of those living under the new conditions as well as those conventionally housed, is stressed in a recent report of the American Municipal Association.[1] In certain localities the policy has been to discourage trailer migration, either by imposing relatively heavy registration fees or by failure to provide adequate facilities for parking. Other agencies, taking a long view and expecting the use of houses on wheels to expand, are planning in such a way that their use may not become a hazard to occupants or neighbors. The trailer development has a decided bearing upon labor mobility. For seasonal workers such as fruit pickers and wheat harvesters, who heretofore have often traveled in cars, setting up tents or makeshift shelter, the trailer would afford decidedly improved living conditions. A large-scale manufacturer believes they may likewise become the permanent homes of industrial workers who could afford to buy a $500 trailer and a small plot of land. Thus trailer dwellers are not necessarily expected to become itinerants, although workers would be freer to migrate to areas where jobs might be available if they could move their houses with them. Of importance also will be the effect of trailers on vacation habits of the American people, and it is for vacations that a large proportion of such vehicles are being used at present. Control of both kinds of use must necessarily be provided.

The Federal Government, taking into account the modern trend toward vacations on wheels, has undertaken the modernization of national park facilities to accommodate trailer vacationists. It is stated that many parks are already equipped to permit trailer parking, and that this movement will be extended in the coming years. A start has been made by making running water available for direct connection with trailers. In addition the occupants have access to general camp facilities for cooking and bathing. As yet there are only a few locations where electricity can be obtained and in only two is it possible to connect the trailer with electric power.

[1] American Municipal Association. Report No. 114: The House Trailer, its Effect on State and Local Government. Chicago, 850 East 58th Street, 1937.

The American Municipal Association has found that at least 17 States have enacted laws governing tourist camps. These States are Arizona, California, Florida, Indiana, Kansas, Maine, Minnesota, Mississippi, Montana, New Hampshire, North Dakota, Oregon, Rhode Island, South Dakota, Utah, Vermont, and Washington. Such legislation usually provides for the licensing of camps. Inspection is primarily for the purpose of enforcing reasonable standards of public health and sanitation. Maine, Michigan, Texas, Florida, and Ohio publish lists of "approved camps." In Michigan, Maine, Texas, and an unnamed additional group of States, the camps are graded according to compliance with sanitary codes. Indiana, Kansas, and Oklahoma provide for the closing of camps that violate the sanitary codes, treating them as nuisances. The introduction of trailers makes it necessary that such laws be brought up to date and extended to cover trailers and trailer camps.

Regulation of trailer camps is at present largely a county problem, as an analysis of the location of 1,000 camps discloses that between two-thirds and three-fourths are located outside the corporate limits of cities and villages but near their borders.

State regulation of trailers and camps naturally applies in counties, but unless the counties themselves have zoning laws specifying types of land use permitted in given areas, and defining the use to which private land may be put, difficulties may arise. For example, without enabling legislation, county officials may not require that trailer occupants lodge at a certain spot in preference to another which may suit their particular fancy.

In all, 11 States have county zoning laws and in 4 of these the legislation applies only in special counties. The States having county zoning laws are California, Georgia (certain counties), Illinois, Indiana, Maryland (certain counties), Michigan, Mississippi (certain counties), Tennessee, Virginia (certain counties), Washington, and Wisconsin.

In municipalities, especially in warm climates, the influx of trailers has made it necessary to enact special ordinances. In Florida, the municipalities of Clearwater, Fort Lauderdale, Miami, and St. Petersburg have such ordinances, as do also Phoenix, Ariz., and the California cities of Banning, Long Beach, Oakland, and San Diego. Helena, Mont., has its own municipal trailer camp, which was built to provide space for 75 trailers formerly parked in various parts of the city.

Control of trailers has also been attempted by placing limits upon the period of parking. In Oakland, Calif., this limit is 90 days and is probably imposed to encourage the use of the vehicles for vacations only. Where, as in Long Beach, Calif., the parking limit is 24 hours, the regulation promotes the use of trailer camps for permanent and seasonal occupancy.

As larger numbers of trailers congregate, cities will be faced with the need of adopting regulatory measures. They will no longer be able to follow the policy, now in evidence, of depending on State law. If trailers are allowed only in licensed camps the problem is much simplified. Where camps are overcrowded it may be necessary to permit the parking of trailers in other locations under strict sanitary and zoning regulations. In establishing standards the following items, compiled from provisions of existing trailer ordinances, are suggested by the American Municipal Association as worthy of consideration.

1. Definition of "house trailer."
2. Definition of "trailer camp."
3. Location outside camp: Permit.
4. Location outside camp: Regulations.
5. Trailer camp operation permit.
6. Application for camp permit.
7. Zoning of trailers and camps.
8. Camp plan.
9. Camp inspection, granting of permit.
10. Water supply.
11. Toilets.
12. Showers, slop sinks, baths.
13. Refuse and sewage disposal.
14. Garbage receptacles.
15. Registration of trailer occupants.
16. Time limit on period of stay.
17. Removal of wheels.
18. Miscellaneous provisions.
19. Miscellaneous duties of manager.
20. General regulating authority.
21. Inspection by city.
22. Revocation or suspension of permit.
23. Penalty for ordinance violation.

A number of other important questions must be settled, including record keeping, standards of occupancy, transient relief, education of children, and method of taxation.

At present, information on trailers and occupants is extremely meager and unorganized. The study reviewed suggests that to overcome this draw-back camps should be required to give much of the needed information. If trailers are allowed to park outside camps, the necessary records could be obtained at the time a permit is issued for such location.

With reference to the special services to itinerants the report states:

> The coming of the trailer has not seriously complicated the problem of providing governmental service to itinerant workers. These persons previously lived in tents or home-made trailers and needed the same service then as they do now in their newer trailers. How to provide their children with an education, how to tax the family for governmental service performed, and how to assign responsibility for transient relief when necessary—these and other problems existed prior to the coming of the trailer. Only a few of these problems have been successfully solved and it is desirable that special attention continue to be given to their solution.

To prevent overcrowding of trailers permanently occupied, governments will have to enforce their respective building-code requirements covering cubic feet of space per occupant. This, it is believed, will raise difficulties, owing to the lack of uniformity as to what is a reasonable requirement.

INDUSTRIAL RELATIONS

National Labor Relations Act Declared Constitutional

IN A recent decision, involving five separate cases, the Supreme Court of the United States sustained the constitutionality of the National Labor Relations Act.[1] (57 Sup. Ct. 615.) One case[2] received the unanimous approval of the judges, while the other four cases[3] were upheld by a vote of five to four. All five cases were appealed from lower courts and involved rulings of the National Labor Relations Board which was established under the act. That act was approved by the President on July 5, 1935, and was designed to "diminish the causes of labor disputes burdening or obstructing interstate and foreign commerce." All of the cases before the Court involved the question of "unfair labor practices." By the terms of the act this term might include any or all of the following acts by an employer: (1) Interference with, restraint, or coercion of employees in organization or collective bargaining; (2) domination or interference with the formation or administration of any labor organization; (3) encouragement of or discouragement from membership in any labor organization by discrimination in the matter of hiring, or period, term, or condition of employment; (4) discharge or discrimination against an employee because of the filing of charges against an employer; and (5) refusal to bargain collectively with representatives of the employees.

The Supreme Court in passing upon the cases was confronted with the problem as to whether the Congress had gone beyond its power in the matter of employer-employee relationships. The Court, either unanimously or by a majority opinion, held that Congress did have the power to regulate interstate commerce.

Motorbus case.—The unanimous opinion related to the case of an operator of motorbusses between the District of Columbia and Virginia. The employing company contended that the enforcement of the act violated the commerce clause as well as other parts of the Constitution. It urged even more strongly that the act attempted to

[1] For the text of this law, known as the Wagner-Connery Act, see Monthly Labor Review, August 1935 (pp. 369-377).

[2] *Washington, Virginia & Maryland Coach Co.*

[3] *The Associated Press; Jones & Laughlin Steel Corporation; Fruehauf Trailer Co.;* and *The Friedman-Harry Marks Clothing Co.*

regulate labor relations in all employments whether interstate or intrastate, and would therefore be void; as an attempted regulation of intrastate commerce, "the whole must fall because its provisions are unseverable." Mr. Justice Roberts, delivering the opinion of the Court, held that this argument was "plainly untenable." "The act limits the jurisdiction of the Board to instances which fall within the commerce power and if the Board should exceed the jurisdiction conferred upon it, any party aggrieved is at liberty to challenge its action."

Associated Press case.—In the *Associated Press case*, the majority opinion, again read by Mr. Justice Roberts, held that such agency was engaged in interstate commerce.

It is an instrumentality set up by constituent members who are engaged in a commercial business for profit, and as such instrumentality acts as an exchange or clearing house of news as between the respective members and as a supplier to members of news gathered through its own domestic and foreign activities. These operations involve the constant use of channels of interstate and foreign communication. They amount to commercial intercourse and such intercourse is commerce within the meaning of the Constitution. Interstate communication of a business nature, whatever the means of such communication, is interstate commerce regulable by Congress under the Constitution.

The Court outlined briefly the purposes of the act, and in answer to the claim of the agency that the discharged employee was far removed from interstate activity, said:

We think, however, it is obvious that strikes or labor disturbances amongst this class of employees would have as direct an effect upon the activities of the petitioner as similar disturbances amongst those who operate the teletype machines or as a strike amongst the employees of telegraph lines over which petitioner's messages travel.

Does the act, as contended by the Associated Press, abridge the freedom of speech or of the press? The majority opinion held that it did not and that the contention had "no relevance to the circumstances of the instant case but is an unsound generalization."

The order of the Board in nowise circumscribes the full freedom and liberty of the petitioner to publish the news as it desires it published or to enforce policies of its own choosing with respect to the editing and rewriting of news for publication, and the petitioner is free at any time to discharge Watson or any editorial employee who fails to comply with the policies it may adopt.

The minority opinion, read by Mr. Justice Sutherland, made special reference to the abridgment of freedom of the press, as follows:

The destruction or abridgment of a free press—which constitutes one of the most dependable avenues through which information of public and governmental activities may be transmitted to the people—would be an event so evil in its consequences that the least approach toward that end should be halted at the threshold.

Freedom is not a mere intellectual abstraction; and it is not merely a word to adorn an oration upon occasions of patriotic rejoicing. It is an intensely practical

reality, capable of concrete enjoyment in a multitude of ways day by day. When applied to the press, the term "freedom" is not to be narrowly confined; and it obviously means more than publication and circulation.

Steel case.—The majority decision in the *Jones & Laughlin Steel Corporation case* was written by Mr. Chief Justice Hughes. He traced the history of the case, mentioned the vast business of the company, and analyzed the reasoning of the company challenging the act. In general the act was attacked as being an attempt to regulate all industry "thus invading the reserved powers of the States over their local concerns." It was argued that at best the references in the act to interstate and foreign commerce are "colorable"; that the act was not "a true regulation of such commerce or of matters which directly affect it but on the contrary has the fundamental object of placing under the compulsory supervision of the Federal Government all industrial labor relations within the Nation." The Court commented that the argument sought support in the broad words of the preamble of the act, and that it had been insisted that the legislative history of the act showed "an essential universal purpose in the light of which its scope cannot be limited by either construction or by the application of the separability clause." If this argument was sound, "the act would necessarily fall by reason of the limitation upon the Federal power which inheres in the constitutional grant, as well as because of the explicit reservation of the tenth amendment." The Chief Justice also remarked that the authority of the Federal Government "may not be pushed to such an extreme as to destroy the distinction, which the commerce clause itself establishes, between commerce 'among the several States' and the internal concerns of a State." "That distinction", he said, "is vital to the maintenance of our Federal system." But, he continued:

> We are not at liberty to deny effect to specific provisions, which Congress has constitutional power to enact, by superimposing upon them inferences from general legislative declarations of an ambiguous character, even if found in the same statute. The cardinal principle of statutory construction is to save and not to destroy. We have repeatedly held that as between two possible interpretations of a statute, by one of which it would be unconstitutional and by the other valid, our plain duty is to adopt that which will save the act. Even to avoid a serious doubt the rule is the same.

The majority opinion concluded that the National Labor Relations Act may be construed "so as to operate within the sphere of constitutional authority." "There can be no question", it was pointed out, that the commerce contemplated by the act "is interstate and foreign commerce in the constitutional sense." By the terms of the act "affecting commerce" means in commerce, or burdening or obstructing commerce or the free flow of commerce, or having led or tending to lead to a labor dispute burdening or obstructing com-

merce or the free flow of commerce. This definition, the Court showed, was one of exclusion, and stated further that—

> The grant of authority to the Board does not purport to extend to the relationship between all industrial employees and employers. Its terms do not impose collective bargaining upon all industry regardless of effects upon interstate or foreign commerce. It purports to reach only what may be deemed to burden or obstruct that commerce and, thus qualified, it must be construed as contemplating the exercise of control within constitutional bounds. It is a familiar principle that acts which directly burden or obstruct interstate or foreign commerce, or its free flow, are within the reach of the congressional power. Acts having that effect are not rendered immune because they grow out of labor disputes.

As to the right of the employees to organize under the terms of the act, the majority opinion stated that it was a "fundamental right."

> Employees have as clear a right to organize and select their representatives for lawful purposes as the respondent has to organize its business and select its own officers and agents. Discrimination and coercion to prevent the free exercise of the right of employees to self-organization and representation is a proper subject for condemnation by competent legislative authority. Long ago we stated the reason for labor organizations. We said that they were organized out of the necessities of the situation; that a single employee was helpless in dealing with an employer; that he was dependent ordinarily on his daily wage for the maintenance of himself and family; that if the employer refused to pay him the wages that he thought fair, he was nevertheless unable to leave the employ and resist arbitrary and unfair treatment; that union was essential to give laborers opportunity to deal on an equality with their employer.

In concluding the majority opinion, the Court distinguished previously decided cases advanced by the company, and ordered the reinstatement and reimbursement of the discharged employees. The Court held that the National Labor Relations Board acted "within its competency and that the act is valid as here applied."

Trailer case.—In the case of Fruehauf Trailer Co., the majority opinion held that the National Labor Relations Act was constitutional as applied to this company, a manufacturer of automobile trailers in Detroit, Mich. It was applicable, the Court said, since the manufacturing and assembling operations at the plant in Detroit were essentially connected with and dependent upon purchases and sales, as well as the distribution of the products, outside the State of Michigan. It was also found that the raw materials used in the manufacture of such equipment were received in Detroit from outside the State of Michigan. The Court supported the findings of the Board that the company was engaged in an unfair labor practice as set forth in the National Labor Relations Act.

Clothing case.—In this case, Mr. Chief Justice Hughes, delivering the majority opinion, held that insofar as the National Labor Relations Act was applicable to employment relationships between a manufacturer of men's clothing and its employees the act was a

constitutional exercise of power of Congress to regulate interstate commerce. The opinion pointed out that more than 99 percent of the raw materials used in the manufacture of clothing were shipped into the State and that, in approximately 82 percent of the sales, the finished product was shipped out to other States for resale. In this case, as well as the *Trailer case*, the Court held that the same reasons which prompted the majority to uphold the *Steel Company case* existed in the disposition of these cases.

Dissenting opinions.—In the dissenting opinons, Justices McReynolds, Van Devanter, Sutherland, and Butler combined three of the cases, declaring that Congress had exceeded its powers in the enactment of the National Labor Relations Act.

The dissenting Justices thought that the decisions of the lower courts in these cases were sound. Reference was particularly made in the dissenting opinion to the decisions of the Supreme Court in the *N. R. A.* and *Guffey Coal cases* in which it was held that the power of Congress under the commerce clause did not extend to employer-employee relationships in the manufacture of goods. "The Court as we think, departs from the well-established principles followed in these cases", Mr. Justice McReynolds stated.

It was the opinion of the minority that the act placed in the hands of the Board power of control over local industry "beyond anything heretofore deemed permissible."

In the minority opinion read by Mr. Justice McReynolds, several inquiries were directed at the majority. Granting that the theory of a continuous "stream of commerce", as now defined is correct, will it become the duty of the Federal Government hereafter to suppress every strike or disturbance which may block that stream? And since Congress had now entered the field, would labor relations between the manufacturer and his employees be removed from all control by the State?

The minority opinion pointed out that there were two distinct phases in the business of manufacture—that involving the raw material and that involving the actual process of manufacture. Each, the opinion said, was a separate and local activity, whether the industry was small or large. It would be unreasonable and unprecedented if the commerce clause conferred upon Congress power in these local activities. Whatever effect any cause of discontent might eventually have upon commerce it was too indirect to require Congressional regulation. As to the rights of employer and employee in the matter of employment contracts, the minority Justices felt that "the right to contract is fundamental and includes the privilege of selecting those with whom one is willing to assume contractual obligations. This right is unduly abridged."

Railway Labor Act Upheld by United States Supreme Court

AN IMPORTANT decision affecting labor relations was rendered by the United States Supreme Court on March 29, 1937, when it unanimously upheld the constitutionality of the Railway Labor Act.[1] (*Virginian Railway Co.* v. *System Federation No. 40, etc., et al.*, 57 Sup. Ct. 592.)

The case concerned a labor organization, known as System Federation No. 40, an affiliate of the American Federation of Labor and the Virginian Railway Co., an interstate rail carrier. The Federation, representing the shop-craft employees of the railroad company, brought an action in the District Court for Eastern Virginia. The purpose of the suit was to force the railroad company to recognize and deal with the Federation as the duly accredited representative of the employees of the mechanical department. It was also the Federation's objective to restrain the company from "interfering with, influencing or coercing its shop-craft employees in their free choice of representatives for the purpose of contracting" with the company "with respect to rules, rates of pay and working conditions, and for the purpose of considering and settling disputes" between the company and the employees.

Following the failure of a strike in 1922 by the affiliated shop employees, other employees organized a local union known as the Mechanical Department Association of the Virginian Railway. This association entered into an agreement with the company regarding rates of pay, working conditions, and settlement of labor disputes. It was stated, however, in the course of the case at issue, that no substantial grievance had ever been presented to the company by the association, and that the company maintained some measure of control over the organization. Five years after the strike, the American Federation of Labor formed a local organization which in 1934 demanded recognition by the railroad of its right "to represent the shop-craft employees." In establishing its authority the union sought the aid of the National Mediation Board provided for under the amended Railway Labor Act. After an election held to determine representatives for the purpose of collective bargaining, the Board certified the Federation as the duly accredited representative of the employees in the shop crafts.

The lower court supported the ruling of the Board. The court also found that the company had tried to influence its employees against affiliation with any union except with the one maintained by the railroad, and to prevent its employees from choosing their own representatives. A decree issued by the court directed the company to deal with the Federation and forbade any agreements with other groups

[1] For text of act of May 20, 1926, as amended in 1934, see Monthly Labor Review, August 1934 (p. 354).

or the organizing of any union "for the purpose of interfering with the Federation as the accredited representative of such employees." The Court of Appeals of the Fourth Circuit later affirmed the decree, and the company carried the case to the United States Supreme Court.

The main contention of the railroad company was that the procedure in the Railway Labor Act relative to certification of representatives of a craft imposed no "legally enforceable obligation" upon the railroad to negotiate with the certified representative. Again, the company raised the objection that to have the act apply to its "back shop" employees was not a regulation of interstate commerce authorized by the commerce clause of the Constitution of the United States. The railroad also raised the question of a denial of due process guaranteed by the fifth amendment, by the imposition on the carrier of an obligation "to negotiate with a labor union authorized to represent its employees, and restrains it from making agreements with any other labor organization."

Mr. Justice Stone, rendering the opinion of the Court, traced the history of the agency established to consider disputes among railroad employees. By the provisions of the Transportation Act of 1920 (41 Stat. 456), Congress created the Railroad Labor Board "as a means for the peaceful settlement by agreement or by arbitration, of labor controversies between interstate carriers and their employees." Continuing, the Court showed that Congress was aware of the impotence of the Board and also of the fact that "its authority was generally not recognized or respected by the railroads or their employees." Accordingly, new legislation was adopted in 1926 under which Congress continued the policy "of encouraging the amicable adjustment of labor disputes by their voluntary submission to arbitration before an impartial board", but also provided the means "for enforcing the award obtained by arbitration between the parties to labor disputes."

The court referred to several sections of the act of 1926, relative to the designation of representatives, and to a case [2] wherein it had been held by the Supreme Court "that employees were free to organize and to make choice of their representatives without the 'coercive influence' and 'pressure' of a company union." The prohibition against interference on the part of the employer was made more explicit by a 1934 amendment.

The railroad company did not challenge, the Court said, "that part of the decree which enjoins any interference by it with the free choice of representatives by its employees, and the fostering in the circumstances of this case, of the company union." As to the contention of the company that the act afforded no legal sanction for the compulsory dealing with the union, the Court said:

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[1] *Texas & New Orleans Railroad Co.* v. *Brotherhood of Railway and Steamship Clerks*, 281 U. S. 548.

It is, we think, not open to doubt that Congress intended that this requirement be mandatory upon the railroad employer, and that its command, in a proper case, be enforced by the courts. The policy of the Transportation Act of encouraging voluntary adjustment of labor disputes, made manifest by those provisions of the act which clearly contemplated the moral force of public opinion as affording its ultimate sanction, was, as we have seen, abandoned by the enactment of the Railway Labor Act. Neither the purposes of the later act, as amended, nor its provisions when read, as they must be, in the light of our decision in the *Railway Clerks case, supra*, lend support to the contention that its enactments, which are mandatory in form and capable of enforcement by judicial process, were intended to be without legal sanction.

Experience had shown, before the amendment of 1934, that when there was no dispute as to the organizations authorized to represent the employees, and when there was willingness of the employer to meet such representative for a discussion of their grievances, amicable adjustment of differences had generally followed and strikes had been avoided. On the other hand, a prolific source of dispute had been the maintenance by the railroads of company unions and the denial by railway management of the authority of representatives chosen by their employees.

In considering the propriety of the legislation by the Congress, the Court expressed the opinion that—

We cannot ignore the judgment of Congress, deliberately expressed in legislation, that where the obstruction of the company union is removed, the meeting of employers and employees at the conference table is a powerful aid to industrial peace. Moreover, the resources of the Railway Labor Act are not exhausted if negotiation fails in the first instance to result in agreement. If disputes concerning changes in rates of pay, rules or working conditions, are "not adjusted by the parties in conference", either party may invoke the mediation services of the Mediation Board, section 5, First, or the parties may agree to seek the benefits of the arbitration provision of section 7. With the coercive influence of the company union ended, and in view of the interest of both parties in avoiding a strike, we cannot assume that negotiation, as required by the decree, will not result in agreement, or lead to successful mediation or arbitration, or that the attempt to secure one or another through the relief which the district court gave is not worth the effort.

As to the public interest involved in the legislation—

More is involved than the settlement of a private controversy without appreciable consequences to the public. The peaceable settlement of labor controversies, especially where they may seriously impair the ability of an interstate rail carrier to perform its service to the public, is a matter of public concern. That is testified to by the history of the legislation now before us, the reports of committees of Congress having the proposed legislation in charge, and by our common knowledge. Courts of equity may, and frequently do, go much farther both to give and withhold relief in furtherance of the public interest than they are accustomed to go when only private interests are involved.

The Court next considered the constitutionality of the Railway Labor Act and the validity of the act under the commerce clause, and said:

The power of Congress over interstate commerce extends to such regulations of the relations of rail carriers to their employees as are reasonably calculated to prevent the interruption of interstate commerce by strikes and their attendant

disorders (*Wilson* v. *New*, 243 U. S. 332, 347–348). The Railway Labor Act, section 2, declares that its purposes, among others, are "To avoid any interruption to commerce or to the operation of any carrier engaged therein", and "to provide for the prompt and orderly settlement of all disputes concerning rates of pay, rules, or working conditions." The provisions of the act and its history, to which reference has been made, establish that such are its purposes, and that the latter is in aid of the former. What has been said indicates clearly that its provisions are aimed at the settlement of industrial disputes by the promotion of collective bargaining between employers and the authorized representative of their employees, and by mediation and arbitration when such bargaining does not result in agreement. It was for Congress to make the choice of the means by which its objective of securing the uninterrupted service of interstate railroads was to be secured, and its judgment, supported as it is by our long experience with industrial disputes, and the history of railroad labor relations, to which we have referred, is not open to review here. The means chosen are appropriate to the end sought and hence are within the congressional power. (See *Railway Clerks case, supra*, 570; *Railraod Retirement Baord* v. *Alton R. Co.*, 295 U. S. 330, 369.)

As to the application of the act to "back shop" employees, the Court outlined the nature of the work in the following language:

Of the 824 employees in the 6 shop crafts eligible to vote for a choice of representatives, 322 work in petitioner's "back shops" at Princeton, W. Va. They are there engaged in making classified repairs, which consist of heavy repairs on locomotives and cars withdrawn from service for that purpose for long periods (an average of 105 days for locomotives and 109 days for cars). The repair work is upon the equipment used by petitioner in its transportation service, 97 percent of which is interstate. At times a continuous stream of engines and cars passes through the "back shops" for such repairs. When not engaged in repair work, the back-shop employees perform "store order work", the manufacture of material such as rivets and repair parts, to be placed in railroad stores for use at the Princeton shop and other points on the line.

The activities in which these employees are engaged have such a relation to the other confessedly interstate activities of the petitioner that they are to be regarded as a part of them. All taken together fall within the power of Congress over interstate commerce.

In answering the contention of the railroad that they could close their shops and turn the repair work over to independent companies, the Court observed as follows:

Whether the railroad should do its repair work in its own shops, or in those of another, is a question of railroad management. It is petitioner's determination to make its own repairs which has brought its relations with shop employees within the purview of the Railway Labor Act. It is the nature of the work done and its relation to interstate transportation which afford adequate basis for the exercise of the regulatory power of Congress.

In answering the contention of the railroad company that the certificate of the National Mediation Board was invalid, the Court explained the method of election and said that—

The practice contended for is undoubtedly desirable, but it is not required by the present statute or by the authorities upon which petitioner relies. The National Mediation Board makes no order. The command which the decree of the Court enforces is that of the statute, not of the Board. Its certificate that

the Federation is the authorized representative of the employees is the ultimate finding of fact prerequisite to enforcement by the courts of the command of the statute. There is no contention that this finding is conclusive in the absence of a finding of the basic facts on which it rests—that is to say, the number of eligible voters, the number participating in the election, and the choice of the majority of those who participate. Whether the certification, if made as to those facts, is conclusive, it is unnecessary now to determine. But we think it plain that if the Board omits to certify any of them, the omitted fact is open to inquiry by the court asked to enforce the command of the statute. (See *Dismuke* v. *United States*, 297 U. S. 167, 171–173.) Such inquiry was made by the trial court, which found the number of eligible voters and thus established the correctness of the Board's ultimate conclusion. The certificate, which conformed to the statutory requirement, was prima facie sufficient, and was not shown to be invalid for want of the requisite supporting facts.

The Court finally disposed of the contention of the company that the injunction granted was prohibited by the provisions of the Norris-La Guardia Act (47 Stat. 70).

"The evident purpose" of the act, said Mr. Justice Stone—

was not to preclude mandatory injunctions, but to forbid blanket injunctions against labor unions, which are usually prohibitory in form, and to confine the injunction to the particular acts complained of and found by the Court. We deem it unnecessary to comment on other similar objections, except to say that they are based on strained and unnatural constructions of the words of the Norris-La Guardia Act, and conflict with its declared purpose, section 2, that the employee "shall be free from the interference, restraint, or coercion of employers of labor, or their agents, in the designation of such representatives or in self-organization or in other concerted activities for the purpose of collective bargaining or other mutual aid or protection."

It suffices to say that the Norris-La Guardia Act can affect the present decree only so far as its provisions are found to conflict with those of section 2, Ninth, of the Railway Labor Act, authorizing the relief which has been granted. Such provisions cannot be rendered nugatory by the earlier and more general provisions of the Norris-La Guardia Act.

The Court therefore affirmed the decision of the lower court.

MINIMUM WAGE

Minimum-Wage Law of Washington State Held Constitutional

THE Supreme Court on March 29, 1937, declared that the minimum-wage law for women and minors in the State of Washington was a valid and proper exercise of power by the legislature of that State (*West Coast Hotel Co.* v. *Parrish*, 57 Sup. Ct. 578). By a five to four decision the Court reversed a previous ruling on the question of the constitutionality of minimum-wage laws. As late as June 1936 the Court, by the same division, had declared unconstitutional the minimum-wage law of New York. The decision in the New York case was based on one made in the *Adkins case* in 1923,[1] when the Minimum-Wage Act passed by Congress for the District of Columbia was declared unconstitutional as representing an unwarranted interference with the individual right of freedom of contract.

The Washington State minimum-wage law, recently in question, was adopted in 1913. Prior to its consideration by the United States Supreme Court it had twice been upheld by the supreme court of the State. Justification of that legislation had been based by the legislature on the necessity of protecting women and minors "from conditions of labor which have a pernicious effect on their health or morals." Under the police powers of the State, it was declared that inadequate wages and unsanitary conditions of labor exert such a pernicious effect. If, upon investigation by the commission established to administer the act, it was found that the wages paid to women were "inadequate to supply them necessary cost of living and to maintain the workers in health", the commission was empowered to hold and establish an adequate minimum wage.

In the present case, one Elsie Parrish was employed as a chambermaid by the West Coast Hotel Co. She brought an action to recover the difference between the minimum ($14.50 a week of 48 hours) established in accordance with the law and the wages paid her.

The hotel company challenged the Minimum Wage Act as repugnant to the due-process clause of the fourteenth amendment to the Constitution of the United States, and relied upon the decision of the Supreme Court in the *Minimum-Wage case* in the District of Columbia.

[1] *Adkins* v. *Children's Hospital* (261 U. S. 525).

Majority Opinion

A VITAL question was presented as to whether the minimum-wage laws of the District of Columbia and New York were distinguishable. The majority opinion of the Supreme Court, read by Mr. Chief Justice Hughes, referred to the decision in the *New York Minimum-Wage case* [2] in which the majority of the Court affirmed the judgment, "as the Court considered that the only question before it was whether the *Adkins case* was distinguishable and that reconsideration of that decision had not been sought." In the present case, however, the question of reconsideration was declared to be "open and is necessarily presented." The Chief Justice made reference to the decision in the State court of Washington, upholding the Minimum-Wage Act, and said that "we are of the opinion that this ruling of the State court demands on our part a reexamination of the *Adkins case*."

The importance of the question, in which many States having similar laws are concerned, the close division by which the decision in the *Adkins case* was reached, and the economic conditions which have supervened, and in the light of which the reasonableness of the exercise of the protective power of the State must be considered, make it not only appropriate, but we think imperative, that in deciding the present case the subject should receive fresh consideration.

The history of minimum-wage litigation was reviewed briefly, and in discussing the alleged deprivation of freedom of contract, which was the principal objection raised in the prior cases, the Court said:

The principle which must control our decision is not in doubt. The constitutional provision invoked is the due-process clause of the fourteenth amendment governing the States, as the due-process clause invoked in the *Adkins case* governed Congress. In each case the violation alleged by those attacking minimum-wage regulation for women is deprivation of freedom of contract. What is this freedom? The Constitution does not speak of freedom of contract. It speaks of liberty and prohibits the deprivation of liberty without due process of law. In prohibiting that deprivation the Constitution does not recognize an absolute and uncontrollable liberty. Liberty in each of its phases has its history and connotation. But the liberty safeguarded is liberty in a social organization which requires the protection of law against the evils which menace the health, safety, morals, and welfare of the people. Liberty under the Constitution is thus necessarily subject to the restraints of due process, and regulation which is reasonable in relation to its subject and is adopted in the interests of the community is due process.

The *Adkins case*, it was held, was "a departure from the true application of the principles governing the regulation by the State of the relation of employer and employed." The Court, though recognizing the "earnestness and vigor" of the majority opinion in the *Adkins case*, found it "impossible to reconcile that ruling with these well-considered declarations."

What can be closer to the public interest than the health of women and their protection from unscrupulous and overreaching employers? And if the protection

[1] *Morehead* v. *Tipaldo* (298 U. S. 587).

of women is a legitimate end of the exercise of State power, how can it be said that the requirement of the payment of a minimum wage fairly fixed in order to meet the very necessities of existence is not an admissible means to that end? The legislature of the State was clearly entitled to consider the situation of women in employment, the fact that they are in the class receiving the least pay, that their bargaining power is relatively weak, and that they are the ready victims of those who would take advantage of their necessitous circumstances. The legislature was entitled to adopt measures to reduce the evils of the "sweating system", the exploiting of workers at wages so low as to be insufficient to meet the bare cost of living, thus making their very helplessness the occasion of a most injurious competition. The legislature had the right to consider that its minimum-wage requirements would be an important aid in carrying out its policy of protection. The adoption of similar requirements by many States evidences a deep-seated conviction both as to the presence of the evil and as to the means adapted to check it. Legislative response to that conviction cannot be regarded as arbitrary or capricious and that is all we have to decide. Even if the wisdom of the policy be regarded as debatable and its effects uncertain, still the legislature is entitled to its judgment.

Cognizance was taken of recent economic changes and it was pointed out that—

The exploitation of a class of workers who are in an unequal position with respect to bargaining power and are thus relatively defenseless against the denial of a living wage is not only detrimental to their health and well-being but casts a direct burden for their support upon the community. What these workers lose in wages the taxpayers are called upon to pay. The bare cost of living must be met. We may take judicial notice of the unparalleled demands for relief which arose during the recent period of depression and still continue to an alarming extent despite the degree of economic recovery which has been achieved. * * *

The community is not bound to provide what is in effect a subsidy for unconscionable employers. The community may direct its law-making power to correct the abuse which springs from their selfish disregard of the public interest.

The conclusion, therefore, of the majority of the Court was that the decision in the minimum-wage case in the District of Columbia, commonly referred to as the *Adkins case*, must be overruled. Thus the Court has decreed that the State legislatures have the power to enact reasonable minimum-wage legislation to correct a recognized evil in the industrial life of the Nation.

Minority Opinion

A MINORITY opinion by Mr. Justice Sutherland, concurred in by Justices Van Devanter, McReynolds, and Butler, held that the judgment of the lower court should be reversed. The minority group based its position on the two celebrated cases concerning the District of Columbia and the New York minimum-wage laws, observing that the Washington law was "in every substantial respect identical with the statute involved in the *Adkins case*." While the majority opinion did not consider the Washington law an arbitrary discrimination because it did not apply to men, the minority opinion took notice of this in the following language:

The Washington statute, like the one for the District of Columbia, fixes minimum wages for adult women. Adult men and their employers are left free to bargain as they please; and it is a significant and an important fact that all State statutes to which our attention has been called are of like character. The common-law rules restricting the power of women to make contracts have, under our system, long since practically disappeared. Women today stand upon a legal and political equality with men. There is no longer any reason why they should be put in different classes in respect of their legal right to make contracts; nor should they be denied, in effect, the right to compete with men for work paying lower wages which men may be willing to accept. And it is an arbitrary exercise of the legislative power to do so.

Difference of sex affords no reasonable ground for making a restriction applicable to the wage contracts of all working women from which like contracts of all working men are left free. Certainly a suggestion that the bargaining ability of the average woman is not equal to that of the average man would lack substance. The ability to make a fair bargain, as everyone knows, does not depend upon sex.

In concluding the minority opinion, Mr. Justice Sutherland observed:

It may be said that a statute absolutely fixing wages in the various industries at definite sums and forbidding employers and employees from contracting for any other than those designated, would probably not be thought to be constitutional. It is hard to see why the power to fix minimum wages does not connote a like power in respect of maximum wages. And yet, if both powers be exercised in such a way that the minimum and the maximum so nearly approach each other as to become substantially the same, the right to make any contract in respect of wages will have been completely abrogated.

Minimum-Wage Law of Washington State

THE United States Supreme Court having upheld the constitutionality of the minimum-wage law of the State of Washington, the indications are that other States will adopt similar legislation. For this reason the complete text of that law, as given in Remington's Revised Statutes, 1931, is reproduced below:

SECTION 7623. *Reason for law.*—The welfare of the State of Washington demands that women and minors be protected from conditions of labor which have a pernicious effect on their health or morals. The State of Washington, therefore, exercising herein its police and sovereign power declares that inadequate wages and unsanitary conditions of labor exert such pernicious effect.

SEC. 7624. *Employment when unlawful.*—It shall be unlawful to employ women or minors in any industry or occupation within the State of Washington under conditions of labor detrimental to their health or morals; and it shall be unlawful to employ women workers in any industry within the State of Washington at wages which are not adequate for their maintenance.

SEC. 7624½. *Establishment of commission.*—There is hereby created a commission to be known as the Industrial Welfare Commission for the State of Washington, to establish such standards of wages and conditions of labor for women and minors employed within the State of Washington, as shall be held hereunder to be reasonable and not detrimental to health and morals, and which shall be

sufficient for the decent maintenance of women. [In 1921 the industrial welfare commission was abolished and the duties of the commission were transferred to the director of labor and industries.]

SEC. 7625. *Powers and duties.*—It shall be the duty of the commission to ascertain the wages and conditions of labor of women and minors in the various occupations, trades, and industries in which said women and minors are employed in the State of Washington. To this end, said commission shall have full power and authority to call for statements and to examine, either through its members or other authorized representatives, all books, pay rolls, or other records of all persons, firms, and corporations employing females or minors as to any matters that would have a bearing upon the question of wages of labor or conditions of labor of said employees.

SEC. 7626. *Records of employees.*—Every employer of women and minors shall keep a record of the names of all women and minors employed by him, and shall on request permit the commission or any of its members or authorized representatives to inspect such record.

SEC. 7627. *"Minor" defined.*—For the purposes of this act a minor is defined to be a person of either sex under the age of eighteen (18) years.

SEC. 7628. *Hearings.*—The commission shall specify times to hold public hearings, at which times employers, employees or other interested persons may appear and give testimony as to the matter under consideration. The commission shall have power to subpena witnesses and to administer oaths. All witnesses subpenaed by the commission shall be paid the same mileage and per diem allowed by law for witnesses before the superior court in civil cases.

SEC. 7629. *Conferences.*—If, after investigation, the commission shall find that in any occupation, trade, or industry, the wages paid to female employees are inadequate to supply them necessary cost of living and to maintain the workers in health, or that the conditions of labor are prejudicial to the health or morals of the workers, the commission is empowered to call a conference composed of an equal number of representatives of employers and employees in the occupation or industry in question, together with one or more disinterested persons representing the public; but the representatives of the public shall not exceed the number of representatives of either of the other parties; and a member of the commission shall be a member of such conference and chairman thereof. The commission shall make rules and regulations governing the selection of representatives and the mode of procedure of said conference, and shall exercise exclusive jurisdiction over all questions arising as to the validity of the procedure and of the recommendations of said conference. On request of the commission, it shall be the duty of the conference to recommend to the commission an estimate of the minimum wage adequate in the occupation or industry in question to supply the necessary cost of living, and maintain the workers in health, and to recommend standards of conditions of labor demanded for the health and morals of the employees. The findings and recommendations of the conference shall be made a matter of record for the use of the commission.

SEC. 7630. *Review by commission.*—Upon the receipt of such recommendations from a conference, the commission shall review the same and may approve any or all of such recommendations, or it may disapprove any or all of them and recommit the subject or the recommendations disapproved of, to the same or a new conference. After such approval of the recommendations of a conference the commission shall issue an obligatory order to be effective in sixty (60) days from the date of said order, or if the commission shall find that unusual conditions necessitate a longer period, then it shall fix a later date, specifying the minimum wage for women in the occupation affected, and the standard conditions of labor for said women; and after such order is effective, it shall be unlawful for any

employer in said occupation to employ women over eighteen (18) years of age for less than the rate of wages, or under conditions of labor prohibited for women in the said occupation. The commission shall send by mail so far as practicable to each employer in the occupation in question a copy of the order, and each employer shall be required to post a copy of said order in each room in which women affected by the order are employed. When such commission shall specify a minimum wage hereunder the same shall not be changed for 1 year from the date when such minimum wage is so fixed.

SEC. 7631. *Revision of orders.*—Whenever wages or standard conditions of labor have been made mandatory in any occupation, upon petition of either employers or employees, the commission may at its discretion reopen the question and reconvene the former conference or call a new one, and any recommendations made by such conference shall be dealt with in the same manner as the original recommendations of a conference.

SEC. 7632. *Special licenses.*—For any occupation in which a minimum rate has been established, the commission through its secretary may issue to a woman physically defective or crippled by age or otherwise, or to an apprentice in such class of employment or occupation as usually required to be learned by apprentices, a special license authorizing the employment of such licensee for a wage less than the legal minimum wage; and the commission shall fix the minimum wage for said person, such special license to be issued only in such cases as the commission may decide the same is applied for in good faith and that such license for apprentices shall be in force for such length of time as the said commission shall decide and determine is proper.

SEC. 7633. *Minors.*—The commission may at any time inquire into wages, and conditions of labor of minors, employed in any occupation in the State and may determine wages and conditions of labor suitable for such minors. When the commission has made such determination in the cases of minors it may proceed to issue an obligatory order in the manner provided for in section 7630 and after such order is effective it shall be unlawful for any employer in said occupation to employ a minor for less wages than is specified for minors in said occupation, or under conditions of labor prohibited by the commission for said minors in its order.

SEC. 7634. *Duty of commissioner of labor.*—Upon the request of the commission the commissioner of labor of the State of Washington shall furnish to the commission such statistics as the commission may require.

SEC. 7635. *Discrimination by employers.*—Any employer who discharges, or in any other manner discriminates against any employee because such employee has testified or is about to testify, or because such employer believes that said employee may testify in any investigation or proceedings relative to the enforcement of this act, shall be deemed guilty of a misdemeanor and upon conviction thereof, shall be punished by a fine of from twenty-five dollars ($25) to one hundred dollars ($100) for each such misdemeanor.

SEC. 7636. *Violations.*—Any person employing a woman or minor for whom a minimum wage or standard conditions of labor have been specified, at less than said minimum wage, or under conditions of labor prohibited by the order of the commission; or violating any other of the provisions of this act, shall be deemed guilty of a misdemeanor, and shall, upon conviction thereof, be punished by a fine of not less than twenty-five dollars ($25) nor more than one hundred dollars ($100).

SEC. 7637. *Complaints.*—Any worker or the parent or guardian of any minor to whom this act applies may complain to the commission that the wages paid to the workers are less than the minimum rate and the commission shall investigate the same and proceed under this act in behalf of the worker.

SEC. 7638. *Actions by employees.*—If any employee shall receive less than the legal minimum wage, except as hereinbefore provided in section 7632, said employee shall be entitled to recover in a civil action the full amount of the legal minimum wage as herein provided for, together with costs and attorney's fees to be fixed by the court, notwithstanding any agreement to work for such lesser wage. In such action, however, the employer shall be credited with any wages which have been paid upon account.

SEC. 7639. *Questions of fact and of law.*—All questions of fact arising under this act shall be determined by the commission and there shall be no appeal from its decision upon said question of fact. Either employer or employee shall have the right of appeal to the superior court on questions of law.

SEC. 7640. *Reports.*—The commission shall biennially make a report to the governor and State legislature of its investigations and proceedings.

SEC. 7641. *Provisions relating to communications industries.*—The industrial welfare commission is hereby authorized, in such manner as it shall deem advisable and upon notice and hearing to parties directly affected thereby, to ascertain and establish such standard of wages, hours of work, and conditions of labor of women and minors, employed in telephone and telegraph industries in rural communities and in cities of less than three thousand (3,000) population, as shall be found reasonable and not detrimental to the health and morals of such women and minors and which shall be sufficient for the decent maintenance of such women and minors, and notwithstanding any statute heretofore passed or regulation of such commission heretofore made relative thereto: *Provided*, That nothing in this act contained shall be construed to amend or repeal any law or any regulation relating to wages, hours of labor, or condition of labor of women or minors excepting as in this act, authorized.

LABOR ORGANIZATIONS

Control of Jurisdictional Disputes Among Building-Trades Unions

STOPPAGE of work because of local jurisdictional disputes in the building industry will be prohibited and local adjustment boards will make provisional adjudication of such conflicts on the job, under the terms of a plan adopted by the Building Trades Department of the American Federation of Labor.[1]

When the factional split in the Building Trades Department was ended by the reorganization of the department in March 1936,[2] the agreement entered into by the two factions provided for the appointment of a national referee to whom questions of jurisdiction could be referred and whose decisions would be final and binding. The executive council of the unified Building Trades Department has recently put into operation a plan for the immediate settlement of jurisdictional disputes which provides for local arbitration boards whose decisions shall be binding pending review by the national referee.

Local building-trades councils and employers' associations are called upon to create local arbitration boards composed of an equal number of employers and organized building-crafts workers. Labor members "must be members of a local union whose international union is recognized by the Building Trades Department of the American Federation of Labor as a bona-fide building-trades organization." No labor member of the board may act in a dispute involving either his craft or his employer. If those circumstances arise, the place of the labor member on the board must be taken by an alternate not directly connected with the dispute.

The local adjustment board must meet within 48 hours after a jurisdictional problem has been presented to it, and must render its decision within 48 hours after the meeting is called. The board must, in the meantime, refer the questions at issue to the Building Trades Department, "to ascertain if the matter in dispute has already been nationally determined."

[1] Based on report in American Federation of Labor Weekly News Service (Washington), Apr. 3, 1937.
[2] See Monthly Labor Review, February 1937 (p. 293).

During the 96-hour period allowed the local board for its provisional decision, "there shall be no strike, abandonment of work, or refusal to work or to go upon the job because of jurisdictional disputes." After the decision is rendered, "should any local labor union fail within 24 hours to abide by and work under any decision arrived at", the employer is given the right "to fill the places with such men, members of other unions, as in his judgment can perform the work." In such case the plan makes it mandatory upon the craftsmen selected by the employer to perform the work in question.

The building-trades council of the locality in which a jurisdictional dispute has been adjudicated is required under the terms of the plan to file with the officials of the Building Trades Department of the American Federation of Labor a copy of the decision.

Any international union whose jurisdictional claims or practices are affected by a decision of a local arbitration board on a jurisdictional issue may appeal from that decision to the national referee. The local determination remains in effect, however, until the case is acted upon by the national referee.

INDUSTRIAL DISPUTES

Trend of Strikes

THERE were more strikes in March 1937 than in any single month in the last 20 years. Preliminary information indicates that about 610 strikes began during the month in which 265,000 workers were involved. There were 140 strikes which continued into March from preceding months, making a total of 750 in progress during the month. About 317,000 workers were involved in these strikes which resulted in 3,280,000 man-days of idleness in March. As compared with the preceding month, the March figures indicate an increase of 165 percent in number of strikes, 148 percent in number of workers involved, and 121 percent in man-days of idleness. As compared with March a year ago, the 1937 figures show an increase of 230 percent in number of strikes, 252 percent in number of workers involved, and 146 percent in man-days of idleness.

Trend of Strikes, January 1936 to March 1937[1]

Year and month	Number of strikes					Workers involved in strikes		Man-days idle during month or year
	Continued from preceding month	Beginning in month or year	In progress during month	Ended in month	In effect at end of month	Beginning in month or year	In progress during month	
1936								
Total for year	----	2,172	----	----	----	788,648	----	13,901,956
January	84	167	251	149	102	32,406	59,153	635,519
February	102	148	250	131	119	63,056	89,735	748,491
March	119	185	304	174	130	75,191	122,162	1,331,162
April	130	183	313	179	134	65,379	95,526	699,900
May	134	206	340	219	121	72,824	123,030	1,019,171
June	121	188	309	158	151	63,429	133,531	1,327,678
July	151	173	324	197	127	38,017	125,281	1,105,480
August	127	228	355	210	145	68,752	118,268	911,216
September	145	234	379	236	143	65,994	130,875	1,063,100
October	143	192	335	219	116	100,845	148,570	1,053,878
November	116	136	252	126	126	70,116	157,007	1,940,628
December	126	132	258	158	100	72,639	184,859	2,065,733
1937								
January	100	160	260	126	134	106,076	211,723	2,698,346
February[1]	134	230	364	224	140	107,000	233,000	1,483,000
March[1]	140	610	750	500	250	265,000	317,000	3,280,000

[1] Strikes involving fewer than 6 workers or lasting less than 1 day are not included in this table, nor in the following tables. Notices or leads regarding strikes are obtained by the Bureau from 670 daily papers, labor papers, and trade journals, as well as from all Government labor boards. Letters are written to representatives of parties in the disputes asking for detailed and authentic information. Since answers to some of these letters have not yet been received, the figures given for the late months are not final. This is particularly true with regard to figures for the last 2 months, and these should be considered as preliminary estimates.

The greatest concentration of strikes during March was in the Detroit and Chicago areas. The largest strike of the month was The Chrysler Corporation strike in Detroit which began March 8 and was settled April 6.

Analysis of Strikes in January 1937[1]

THERE were 260 strikes in progress during January, involving nearly 212,000 workers and resulting in 2,698,000 man-days of idleness during the month. The unusually large number of workers and the resulting large number of man-days idle are accounted for to a large extent by the General Motors Corporation strike, two large strikes in the glass industry, and the maritime strikes on the east and west coasts which were in progress during the month.[2]

Table 1.—Strikes in January 1937, by Industry

Industry	Beginning in January		In progress during January		Man-days idle during January
	Number	Workers involved	Number	Workers involved	
All industries	160	106,076	260	211,723	2,698,348
Iron and steel and their products, not including machinery	7	1,670	12	3,660	37,421
Blast furnaces, steel works, and rolling mills	1	13	1	13	39
Cast-iron pipe and fittings	1	800	2	960	2,400
Stoves	2	595	4	2,234	30,673
Structural and ornamental metal work	1	8	2	38	730
Tin cans and other tinware	1	200	1	200	1,600
Tools (not including edge tools, machine tools, files, and saws) (hand tools)	1	54	1	54	540
Other			1	161	1,449
Machinery, not including transportation equipment	4	2,242	10	4,779	91,841
Agricultural implements			1	2,150	43,000
Cash registers, adding machines, and typewriters	1	80	1	80	480
Electrical machinery, apparatus, and supplies	1	1,817	4	2,090	42,397
Foundry and machine-shop products			2	114	618
Other	2	345	2	345	5,346
Transportation equipment	8	52,258	16	57,656	969,760
Automobiles, bodies and parts	7	52,108	11	54,357	903,190
Shipbuilding	1	150	5	3,299	66,570
Nonferrous metals and their products	4	807	4	807	5,678
Brass, bronze, and copper products	1	138	1	138	1,730
Smelting and refining—copper, lead, and zinc	1	275	1	275	1,650
Stamped and enameled ware	1	164	1	164	1,148
Other	1	230	1	230	1,150
Lumber and allied products	13	5,587	18	6,736	126,227
Furniture	7	781	9	988	11,128
Millwork and planing	1	30	1	30	120
Sawmills and logging camps	1	4,000	2	4,600	104,000
Other	4	776	6	1,118	10,979
Stone, clay, and glass products	3	307	7	14,292	263,403
Brick, tile, and terra cotta	1	85	2	585	755
Glass	1	27	4	13,512	258,943
Pottery	1	195	1	195	3,705
Textiles and their products	33	7,432	58	16,289	172,241
Fabrics:					
Cotton goods	2	856	2	856	6,593
Cotton small wares	1	96	1	96	1,344
Dyeing and finishing textiles	4	649	7	893	8,348
Silk and rayon goods	4	888	8	2,564	37,068
Woolen and worsted goods	2	1,080	3	1,531	20,001
Other	1	125	6	1,159	21,327

[1] Detailed information on a few strikes has not yet been received. (See footnote to preceding table.) Data on missing strikes will be in the annual report.

[2] For accounts of these strikes and their settlement, see Monthly Labor Review for March 1937 (pp. 666 and 670), and April 1937 (p. 813).

Table 1.—Strikes in January 1937, by Industry—Continued

Industry	Beginning in January		In progress during January		Man-days idle during January
	Number	Workers involved	Number	Workers involved	
Textiles and their products—Continued.					
Wearing apparel:					
Clothing, men's	3	420	3	420	805
Clothing, women's	9	523	12	794	6,031
Hats, caps, and millinery			1	150	2,700
Shirts and collars	4	1,333	4	1,333	8,147
Hosiery	2	969	8	5,845	55,400
Knit goods	1	499	2	513	1,777
Other			1	135	2,700
Leather and its manufactures	5	1,035	10	1,861	18,033
Boots and shoes	4	911	6	1,037	7,309
Leather	1	124	2	261	5,657
Other leather goods			2	563	5,067
Food and kindred products	4	707	9	2,358	8,068
Baking			2	333	3,953
Canning and preserving	2	560	2	560	1,270
Confectionery			1	270	270
Slaughtering and meat packing	1	36	3	1,084	1,687
Other	1	111	1	111	888
Tobacco manufactures			1	62	775
Cigars			1	62	775
Paper and printing	8	1,521	9	1,541	2,533
Boxes, paper	2	39	2	39	168
Printing and publishing:					
Newspapers and periodicals	3	76	4	96	286
Other	3	1,406	3	1,406	2,079
Chemicals and allied products	6	450	7	480	6,224
Chemicals	2	132	2	132	775
Explosives			1	30	750
Fertilizers	1	30	1	30	180
Petroleum refining	2	271	2	271	4,281
Other	1	17	1	17	238
Rubber products	4	13,247	4	13,247	53,361
Rubber tires and inner tubes	2	11,325	2	11,325	31,925
Other rubber goods	2	1,922	2	1,922	21,436
Miscellaneous manufacturing	5	352	7	737	9,936
Electric light, power, and manufactured gas	1	204	2	304	3,428
Furriers and fur factories	1	30	1	30	90
Other	3	118	4	403	6,418
Extraction of minerals	6	3,627	9	10,164	32,490
Coal mining, anthracite	3	3,317	5	9,804	28,360
Coal mining, bituminous	1	65	1	65	1,040
Metalliferous mining	1	125	1	125	500
Quarrying and non-metallic mining			1	50	1,550
Crude petroleum producing	1	120	1	120	1,040
Transportation and communication	10	1,256	17	60,234	802,795
Water transportation	2	102	5	57,522	783,069
Motortruck transportation	6	201	9	1,468	10,215
Electric railroad	1	153	1	153	1,836
Motorbus transportation			1	291	7,275
Taxicabs and miscellaneous	[1] 1	800	1	800	400
Trade	12	2,731	19	5,121	27,531
Wholesale	4	247	6	2,351	13,351
Retail	8	2,484	13	2,770	14,180
Domestic and personal service	4	761	11	1,100	6,435
Hotels, restaurants, and boarding houses	1	80	4	299	3,647
Personal service, barbers, beauty parlors	2	81	2	81	864
Laundries			4	120	1,824
Elevator and maintenance workers (when not attached to specific industry)	[1] 1	600	1	600	100
Professional service	1	26	3	77	561
Recreation and amusement			1	7	49
Semiprofessional, attendants, and helpers	1	26	2	70	512
Building and construction	13	3,144	19	3,612	28,948
Buildings, exclusive of P. W. A	9	2,228	11	2,548	21,024
All other construction (bridges, docks, etc., and P. W. A. buildings)	4	916	8	1,064	7,924
Agriculture, etc	5	3,290	5	3,290	28,960
Agriculture	3	770	3	770	3,760
Fishing	2	2,520	2	2,520	25,200
W. P. A., relief, and resettlement projects	4	3,590	4	3,590	4,965
Other nonmanufacturing industries	1	30	1	30	150

[1] Only part of the total number of workers involved in this strike were out by the end of January.

Of the 160 strikes which began in January, 33 were in the textile industries, 13 in both lumber and allied products and building and construction, 12 in trade, and 10 in transportation. The strikes in these industries constituted more than 50 percent of the total number. More than 70 percent of the man-days of idleness during January were in the automobile manufacturing, water transportation, and glass industries, due principally to the five strikes referred to on page 1212.

There were 29 new strikes in New York in January and the same number in Pennsylvania. Ohio experienced 14 new strikes during the month and California 11. The strikes in these four States accounted for more than half of the 160 new strikes in the entire country. A large proportion of the workers involved in strikes during the month were in the interstate strikes shown at the end of table 2. The principal disputes in this group were the large strikes already referred to on page 1212.

Table 2.—Strikes in January 1937, by States

State	Beginning in January		In progress during January		Man-days idle during January
	Number	Workers involved	Number	Workers involved	
All States	160	106,076	260	211,723	2,698,346
Alabama	1	800	2	960	2,400
California	11	4,557	24	11,059	141,484
Connecticut	2	165	2	165	690
District of Columbia	1	19	1	19	57
Florida	2	910	2	910	6,320
Georgia	1	375	2	382	1,549
Illinois	6	684	12	1,286	17,244
Indiana	5	295	7	434	6,145
Maine	2	1,249	2	1,249	12,490
Maryland	2	2,125	2	2,125	12,325
Massachusetts	9	775	10	864	4,278
Michigan	6	2,900	11	3,860	31,298
Minnesota	3	4,030	7	4,803	98,695
Missouri	1	124	2	174	4,030
New Hampshire			1	26	52
New Jersey	8	746	14	1,456	22,636
New York	29	3,907	45	5,964	55,324
North Carolina	2	856	2	856	6,593
Ohio	14	14,223	22	18,290	109,822
Oklahoma	2	271	2	271	4,281
Oregon	1	64	4	739	14,068
Pennsylvania	29	10,770	45	24,179	155,325
Rhode Island	4	627	5	657	5,003
South Carolina	1	115	1	115	690
Tennessee	4	1,807	4	1,807	11,819
Texas	5	362	5	362	2,470
Utah	1	125	1	125	500
Washington	2	1,964	6	3,044	21,895
Wisconsin	4	2,007	10	5,418	69,091
Interstate	2	49,224	7	120,124	1,879,772

The strikes beginning in January, in each industry group, are classified in table 3 according to the number of workers involved. In almost half of the strikes, fewer than 100 workers were involved in each. The average number of workers involved in the 160 strikes was 663. There were only two strikes in which as many as 10,000 workers were involved. These were the General Motors Corporation strike and a short strike of rubber workers in Akron, Ohio.

Table 3.—Strikes Beginning in January 1937, Classified by Number of Workers Involved

Industry group	Total	Number of strikes in which the number of workers involved was—						
		6 and under 20	20 and under 100	100 and under 500	500 and under 1,000	1,000 and under 5,000	5,000 and under 10,000	10,000 and over
All industries	160	24	52	51	19	12	------	2
Manufacturing								
Iron and steel and their products, not including machinery	7	2	1	3	1	------	------	------
Machinery, not including transportation equipment	4	1	1	1	------	1	------	------
Transportation equipment	8	------	1	2	3	1	------	1
Nonferrous metals and their products	4	------	------	4	------	------	------	------
Lumber and allied products	13	------	7	5	------	1	------	------
Stone, clay, and glass products	3	------	2	1	------	------	------	------
Textiles and their products	33	5	10	13	5	------	------	------
Leather and its manufactures	5	------	1	3	1	------	------	------
Food and kindred products	4	------	1	3	------	------	------	------
Paper and printing	8	3	3	1	------	1	------	------
Chemicals and allied products	6	2	2	2	------	------	------	------
Rubber products	4	------	------	------	1	2	------	1
Miscellaneous manufactures	5	1	3	1	------	------	------	------
Nonmanufacturing								
Extraction of minerals	6	------	1	2	1	2	------	------
Transportation and communication	10	3	5	1	1	------	------	------
Trade	12	3	5	3	------	1	------	------
Domestic and personal service	4	------	3	------	1	------	------	------
Professional service	1	------	1	------	------	------	------	------
Building and construction	13	4	2	3	4	------	------	------
Agriculture, etc	5	------	1	2	1	1	------	------
W. P. A. relief, and resettlement projects	4	------	1	1	------	2	------	------
Other nonmanufacturing industries	1	------	1	------	------	------	------	------

Table 4.—Major Issues Involved in Strikes Beginning in January 1937

Major issues	Strikes		Workers involved	
	Number	Percent of total	Number	Percent of total
All issues	160	100.0	106,076	100.0
Wages and hours	55	34.4	25,546	24.1
Wage increase	36	22.6	22,463	21.2
Wage decrease	5	3.1	1,879	1.8
Wage increase, hour decrease	13	8.1	1,189	1.1
Hour decrease	1	.6	15	(1)
Union organization	80	50.0	73,202	69.0
Recognition	12	7.5	50,957	48.1
Recognition and wages	16	10.0	4,767	4.5
Recognition, wages, and hours	38	23.7	14,877	14.0
Closed shop	4	2.5	227	.2
Discrimination	10	6.3	2,374	2.2
Miscellaneous	25	15.6	7,328	6.9
Sympathy	3	1.9	2,273	2.1
Rival unions or factions	2	1.3	310	.3
Jurisdiction	4	2.5	128	.1
Other	15	9.3	4,024	3.8
Not reported	1	.6	393	.6

[1] Less than 1/10 of 1 percent.

In 50 percent of the strikes beginning in January, which included 69 percent of the workers involved, the major issues were union organization matters. In 34 percent of the strikes, which included

24 percent of the workers involved, the major issues were wages and hours. These figures, together with a more detailed classification of the major issues involved in the January strikes, are shown in table 4.

Of the 260 strikes in progress during January, 126 were terminated during the month with an average duration of 30 calendar days. More than one-third of the strikes ended in less than a week after they began and one-fifth of the total number lasted between a week and one-half month. Thirteen of the one hundred and twenty-six strikes, as shown in table 5, had been in progress for 3 months or more.

Table 5.—Duration of Strikes Ending in January 1937

Industry group	Total	Number of strikes with duration of—					
		Less than 1 week	1 week and less than ½ month	½ and less than 1 month	1 and less than 2 months	2 and less than 3 months	3 months or more
All industries	126	46	25	21	12	9	13
Manufacturing							
Iron and steel and their products, not including machinery	8	2	-------	3	2	1	-------
Machinery, not including transportation equipment	3	-------	1	-------	1	-------	1
Transportation equipment	8	7	-------	1	-------	-------	-------
Nonferrous metals and their products	2	1	1	-------	-------	-------	-------
Lumber and allied products	9	4	-------	3	1	1	-------
Stone, clay, and glass products	5	1	1	-------	1	1	1
Textiles and their products	19	8	4	1	-------	2	4
Leather and its manufactures	7	1	2	2	-------	-------	2
Food and kindred products	6	2	1	-------	2	-------	1
Paper and printing	5	3	1	-------	1	-------	-------
Chemicals and allied products	4	2	1	1	-------	-------	-------
Rubber products	2	1	1	-------	-------	-------	-------
Miscellaneous manufactures	3	1	2	-------	-------	-------	-------
Nonmanufacturing							
Extraction of minerals	5	2	2	-------	-------	-------	1
Transportation and communication	5	1	2	-------	1	1	-------
Trade	11	4	-------	3	-------	2	2
Domestic and personal service	6	-------	2	2	2	-------	-------
Professional service	3	-------	-------	2	-------	-------	1
Building and construction	9	3	2	2	1	1	-------
Agriculture, etc	3	-------	2	1	-------	-------	-------
W. P. A., relief, and resettlement projects	2	2	-------	-------	-------	-------	-------
Other nonmanufacturing industries	1	1	-------	-------	-------	-------	-------

Settlements of 47 percent of the strikes ending in January were negotiated directly by the employers and union representatives of the workers involved. In 40 percent of the strikes Government conciliators or labor boards assisted in negotiating settlements, the workers being represented in most of these cases by union officials. The latter group included some of the larger strikes and 58 percent of the total number of workers involved. (See table 6.)

The results of the 126 strikes which ended in January are given in tables 7 and 8, the latter showing a classification of the results in relation to the major issues involved. Nearly half of the strikes, including 30 percent of the workers, resulted in substantial gains to the workers.

One-third of the strikes, which included 43 percent of the workers, resulted in partial gains or compromises, and 16 percent of the strikes, which included only 3 percent of the workers, resulted in little or no gains to the workers. Four strikes, which included 23 percent of the workers involved, were over jurisdictional questions or were due to rivalry between two unions or factions. The largest of these was the strike of seamen on the Atlantic and Gulf coasts which began in November 1936.

Table 6.—Methods of Negotiating Settlements of Strikes Ending in January 1937

Negotiations toward settlements carried on by—	Strikes		Workers involved	
	Number	Percent of total	Number	Percent of total
Total	126	100.0	86,478	100.0
Employers and workers directly	6	4.8	1,569	1.8
Employers and representatives of organized workers directly	59	46.7	33,053	38.2
Government conciliators or labor boards	50	39.7	49,867	57.7
Private conciliators or arbitrators	5	4.0	1,820	2.1
Terminated without formal settlement	6	4.8	169	.2

Table 8 indicates a greater degree of success, from the workers' point of view, in the strikes over union organization matters than in those over wages and hours. Of the wage-and-hour strikes, the workers won 48 percent, compromised 36 percent, and lost 16 percent. Of the strikes over union organization issues, the workers won 53 percent, compromised 36 percent, and lost 11 percent. Of the 20,816 workers involved in the strikes over wages and hours, 15 percent were in strikes in which workers were successful, 80 percent in strikes which were compromised, and 5 percent in strikes which were lost. Of the 38,247 involved in the strikes over union organization matters, 50 percent won, 49 percent obtained compromises, and about 1 percent lost.

Table 7.—Results of Strikes Ending in January 1937

Results	Strikes		Workers involved	
	Number	Percent of total	Number	Percent of total
Total	126	100.0	86,478	100.0
Substantial gains to workers	60	47.6	26,146	30.2
Partial gains or compromises	42	33.3	37,166	43.1
Little or no gains to workers	20	15.9	2,896	3.3
Jurisdiction, rival union, or faction settlements	4	3.2	20,270	23.4

Table 8.—Results of Strikes Ending in January 1937, in Relation to Major Issues Involved

Major issues	Total	Strikes resulting in—			
		Substantial gains to workers	Partial gains or compromises	Little or no gains to workers	Jurisdiction, rival union or faction settlements
	Number of strikes				
All issues	126	60	42	20	4
Wages and hours	50	24	18	8	
Wage increase	35	15	14	6	
Wage decrease	5	2	2	1	
Wage increase, hour decrease	10	7	2	1	
Union organization	55	29	20	6	
Recognition	6	3		3	
Recognition and wages	21	11	8	2	
Recognition, wages, and hours	20	10	9	1	
Closed shop	3	2	1		
Violation of agreement	1	1			
Discrimination	4	2	2		
Miscellaneous	21	7	4	6	4
Sympathy	2	1	1		
Rival unions or factions	2				2
Jurisdiction	2				2
Other	14	6	3	5	
Not reported	1			1	
	Number of workers involved				
All issues	86,478	26,146	37,166	2,896	20,270
Wages and hours	20,816	3,197	16,704	915	
Wage increase	18,180	2,600	14,727	853	
Wage decrease	1,904	210	1,667	27	
Wage increase, hour decrease	732	387	310	35	
Union organization	38,247	19,300	18,631	316	
Recognition	304	206		98	
Recognition and wages	18,268	3,638	14,442	188	
Recognition, wages, and hours	11,623	7,844	3,749	30	
Closed shop	582	312	270		
Violation of agreement	6,000	6,000			
Discrimination	1,470	1,300	170		
Miscellaneous	27,415	3,649	1,831	1,665	20,270
Sympathy	2,200	2,000	200		
Rival unions or factions	20,230				20,230
Jurisdiction	40				40
Other	4,352	1,649	1,631	1,072	
Not reported	593			593	

Conciliation Work of the Department of Labor, March 1937

DURING March 1937 conciliators of the Department of Labor mediated in 143 disputes involving about 50,000 workers. This mediation service was requested by either one or both parties to the disputes. Some of these disputes had already developed into strikes before the Department of Labor was requested to intervene. In others, strikes were threatened but had not yet taken place. In some cases, although no strike was immediately threatened, a controversy between the employer and workers had developed to such a stage that an outside mediator was deemed necessary.

The Department of Labor conciliators cooperated in the adjustment of 80 of these 143 disputes, while 52 were still pending at the close of the month. Six could not be adjusted and five were either settled by the parties concerned or referred to other agencies.

The majority of these disputes concerned demands for wage increases. Many were due to alleged discrimination of union members or for demands for union recognition. Some were concerned with hours, overtime, and general working conditions.

These 143 disputes were scattered among 25 different States and the District of Columbia. Four were interstate. (See table 1.) Workers involved in the disputes were engaged in 46 different crafts or occupations. (See table 2.)

Table 1.—Disputes Handled by Conciliators, March 1937, in Each State

State	Total		Threatened strikes and controversies		Strikes	
	Number	Workers involved	Number	Workers involved	Number	Workers involved
Total	143	[1] 48,562	44	[1] 7,482	99	[1] 41,080
Alabama	3	263	2	143	1	120
California	6	[1] 3,285	2	[1] 48	4	3,237
Connecticut	2	277	1	202	1	75
Delaware	1	600			1	600
District of Columbia	1	110			1	110
Illinois	10	[1] 7,592		(1)	8	7,592
Indiana	4	[1] 264	2	40	2	224
Iowa	2	[1] 300	1	(1)	1	300
Kansas	1	20	1	20		
Kentucky	2	930			2	930
Maine	2	4,120	1	620	1	3,500
Maryland	4	1,679			4	1,679
Massachusetts	2	225	1	200	1	25
Michigan	13	[1] 1,857	1	400	12	[1] 1,457
Minnesota	5	1,251	2	266	3	985
Missouri	5	3,525	2	600	3	2,925
Montana	1	(1)	1	(1)		
Nebraska	1	19	1	19		
New Jersey	5	[1] 1,400	3	[1] 1,400	2	(1)
New York	5	840	3	550	2	290
Ohio	13	[1] 2,483	5	[1] 1,746	8	737
Oklahoma	2	178	2	178		
Pennsylvania	41	[1] 10,562	7	742	34	[1] 9,820
Washington	5	[1] 1,672	2	[1] 8	3	1,664
West Virginia	1	300	1	300		
Wisconsin	2	[1] 70	1	(1)	1	70
Interstate	4	4,740			4	4,740

[1] Exact number of workers not known.

Table 2.—Disputes Handled by Conciliators, by Craft of Workers Involved, March 1937

Craft	Total		Threatened strikes and controversies		Strikes	
	Number	Workers involved	Number	Workers involved	Number	Workers involved
Total	143	[1] 48,562	44	[1] 7,482	99	[1] 41,080
Auto parts	1	24			1	24
Bakery	1	11			1	11
Blacksmiths and drop forgers	1	(1)	1	(1)		
Blind workers	1	107			1	107
Bowling alleys—pin setters	1	1,000			1	1,000
Brick and clay	4	240	2	55	2	185
Building crafts	6	[1] 603	5	[1] 28	1	575
Building service	2	287	1	37	1	250
Casket	1	287			1	287
Cigar makers	9	[1] 1,594			9	[1] 1,594
Cleaners and dyers	1	14			1	14
Clothing	11	1,661	1	200	10	1,461
Coal mining	1	8	1	8		
Dairy	1	150	1	150		
Dress pattern makers	1	400	1	400		
Drivers and teamsters	16	[1] 10,431	3	453	13	[1] 9,978
Drug store workers	1	(1)	1	(1)		
Dry goods (stockroom)	1	50	1	50		
Electrical and radio	3	3,109			3	3,109
Ferry boatmen	2	124			2	124
Fertilizer	1	350			1	350
Firemen	1	450	1	450		
Food and cannery	7	1,820			7	1,820
Foundry	1	135	1	135		
Furniture	1	225			1	225
Iron and steel	9	5,085	1	250	8	4,835
Laboratory (film)	1	(1)			1	(1)
Leather	7	[1] 870	1	200	6	[1] 670
Lumber and sawmill	2	1,562			2	1,562
Machinists and mechanics	12	[1] 3,916	7	[1] 439	5	3,477
Metal	4	460	2	230	2	230
Oil workers	2	178	2	178		
Paper and paper mill	2	240	1	75	1	165
Pattern makers	1	7			1	7
Printing pressmen	2	319	1	19	1	300
Refrigerator	1	40			1	40
Restaurant	3	510			3	510
Rubber	3	1,900	2	1,400	1	500
Safe and padlocks	1	90			1	90
Ship workers	1	2,040			1	2,040
Shoe	3	5,220	2	1,720	1	3,500
Smelters and refiners	1	25			1	25
Steamfitters	3	[1] 900	2	(1)	1	900
Street railway and motorcoach	5	[1] 1,205	2	1,005	3	[1] 200
Textile	2	775			2	775
Warehousemen	1	140			1	140
Not reported	1	(1)			1	(1)

[1] Exact number of workers not known.

Review of Strikes in 1936 [1]

THE year 1936 was characterized by a relatively large number of strikes which, on the average, were small as measured in terms of number of workers involved and length of duration. There were 2,172 strikes in 1936—an increase of 8 percent over 1935, an increase of 17 percent over 1934, and a larger number than in any year since 1921. However, the number of workers involved in the 1936 strikes (788,648) was 29 percent less than in 1935 and 46 percent less than in 1934. The number of man-days of idleness because of strikes in 1936 (13,901,956) was 10 percent less than in 1935 and 29 percent less than in 1934.

The decline in the number of workers involved in 1936 as compared with the 2 previous years is explained in part by the fact that there were no extremely large strikes during the year, whereas in September 1935 there was the short but widespread strike of 400,000 bituminous-coal miners, and in September 1934 there was the general textile strike, in which more than 300,000 workers were involved.

The Bureau of Labor Statistics obtains its statistical information on strikes from the companies and unions directly involved in the disputes, as well as from various Federal and State labor boards and conciliation services. The first information or notice about strikes comes from more than 650 daily papers, labor papers, and journals. Letters or report forms are then sent to representatives of the parties directly involved, in order to get detailed and accurate information. The strike figures include all strikes or lock-outs in which as many as six workers were involved and which lasted as long as 1 day. There were press notices of 21 strikes during 1936 on which detailed information was not obtained and these cases are not included in this report. These were undoubtedly small disputes and some of them were probably no more than threatened strikes. With the exception of these cases, it is believed that the following tables include all strikes occurring in 1936 in the United States.

The trend of strikes during the past 21 years is presented in table 1.

[1] Prepared by Don Q. Crowther of the Bureau's Industrial Relations Division.

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Table 1.—Number of Strikes, Workers Involved, and Man-Days Idle, 1916 to 1936

Year	Number of—			Index (1927–29=100)		
	Strikes	Workers involved [1]	Man-days idle	Strikes	Workers involved	Man-days idle
1916	3,789	1,599,917	[2]	509	514	[2]
1917	4,450	1,227,254	[2]	598	495	[2]
1918	3,353	1,239,989	[2]	451	399	[2]
1919	3,630	4,160,348	[2]	488	1,337	[2]
1920	3,411	1,463,054	[2]	458	470	[2]
1921	2,385	1,099,247	[2]	321	353	[2]
1922	1,112	1,612,562	[2]	149	517	[2]
1923	1,553	756,584	[2]	209	243	[2]
1924	1,249	654,641	[2]	168	210	[2]
1925	1,301	428,416	[2]	175	138	[2]
1926	1,035	329,592	[2]	139	106	[2]
1927	707	329,939	26,218,628	95	106	178
1928	604	314,210	12,631,863	81	101	86
1929	921	288,572	5,351,540	124	93	36
1930	637	182,975	3,316,808	86	59	23
1931	810	341,817	6,893,244	109	110	47
1932	841	324,210	10,502,033	113	104	71
1933	1,695	1,168,272	16,872,128	228	376	115
1934	1,856	1,466,695	19,591,949	250	472	133
1935	2,014	1,117,213	15,456,337	271	359	105
1936	2,172	788,648	13,901,956	292	254	94

[1] The number of workers involved in strikes from 1916 to 1926 is not known for the entire number of strikes. The missing information is for the smaller disputes, however, and it is believed that the totals here given are fairly accurate.
[2] No information available.

Monthly Trend

THE number of strikes in progress during the months of 1936 followed the usual seasonal trend, with the greatest number during the summer and fall and a noticeable decline in the winter months. There were more workers involved, however, and more man-days of idleness in the strikes in progress, during November and December than in any previous months of the year. This was due principally to the fact that a few large strikes, particularly in the water-transportation and glass-manufacturing industries, which began in October, continued through the last 2 months of the year.

Comparative monthly figures on strikes for 1935 and 1936 are shown in table 2. The largest number of strikes in any month in 1936 was 234 in September and the smallest was 132 in December. In 1935 the largest number was 239 in August and the smallest was 90 in December. The large number of workers involved in strikes in September 1935 was due to the short strike of 400,000 bituminous-coal miners. The months of December in 1935 and in 1936 were at the opposite extremes in the yearly story of man-days of idleness. In December 1935 there were fewer man-days of idleness because of strikes than in any other month of the year, whereas in December 1936 there were more man-days of idleness than in any other month.

Table 2.—Strikes in 1935 and 1936, by Months

Month	Number of strikes—				Number of workers involved in strikes—				Man-days idle during month	
	Beginning in month		In progress during month		Beginning in month		In progress during month			
	1935	1936	1935	1936	1935	1936	1935	1936	1935	1936
Year	2,014	2,172	------	------	1,117,213	788,648	------	------	15,456,337	13,901,956
January	140	167	213	251	81,194	32,406	92,630	59,153	720,778	635,519
February	149	148	232	250	64,238	63,056	96,533	89,735	836,498	748,491
March	175	185	277	304	53,089	75,191	98,457	122,162	966,980	1,331,162
April	180	183	294	313	67,857	65,379	124,174	95,526	1,178,851	699,900
May	174	206	307	340	102,491	72,824	151,163	123,030	1,697,848	1,019,171
June	189	188	319	309	48,917	63,429	129,784	133,531	1,311,278	1,327,678
July	184	173	317	324	70,046	38,017	141,829	125,281	1,297,730	1,105,480
August	239	228	377	355	74,313	68,752	150,835	118,268	1,191,663	911,216
September	162	234	311	379	453,820	65,994	514,427	130,875	3,027,040	1,063,100
October	190	192	332	335	48,223	100,845	133,742	148,570	1,562,908	1,053,878
November	142	136	274	252	38,279	70,116	100,732	157,007	1,003,852	1,940,628
December	90	132	210	258	14,746	72,639	61,782	184,859	660,911	2,065,733

Industries Affected

BY FAR the greatest number of strikes in any one industry group was in the textile industries where 455 occurred during 1936. The other industry groups affected by large numbers of strikes were: Building and construction, 230; transportation and communication, 165; trade, 164; lumber and allied products, 143; domestic and personal service, 116; and food and kindred products, 106. The industry groups with the largest numbers of workers involved in strikes during the year were: Textiles, 128,578; transportation and communication, 83,231; rubber products, 76,699; domestic and personal service, 72,246; extraction of minerals, 56,063; and transportation equipment, 54,049. Nearly 60 percent of the 13,901,956 man-days of idleness because of strikes in 1936 occurred in five industry groups: Textiles, 2,777,498; transportation and communication, 2,095,435; extraction of minerals, 1,237,470; lumber and allied products, 1,019,284; and machinery manufacturing industries, 944,720.

Table 3 shows the classification of all strikes beginning in 1936, by industries. The general strike indicated at the end of the table was the 3-day general strike in Pekin, Ill., in February 1936, called in sympathy with another strike in the same city.

Table 3.—Strikes in 1936, by Industry

Industry	Number of strikes beginning in 1936	Number of workers involved	Man-days idle during 1936
All industries	**2,172**	**788,648**	**13,901,956**
Iron and steel and their products, not including machinery	**69**	**21,610**	**484,080**
Blast furnaces, steel works, and rolling mills	11	9,412	298,445
Cast-iron pipe and fittings	1	160	2,820
Cutlery (not including silver and plated cutlery) and edge tools	1	484	7,744
Forgings, iron and steel	3	428	3,098
Hardware	5	2,390	14,040
Plumbers' supplies and fixtures	2	322	30,469
Steam and hot-water heating apparatus and steam fittings	4	1,044	11,230
Stoves	18	4,061	62,354
Structural and ornamental metal work	3	395	1,883
Tin cans and other tinware	3	294	8,614
Tools (not including edge tools, machine tools, files, and saws) (hand tools)	2	238	4,807
Wirework	4	947	17,064
Other	12	1,435	21,522
Machinery, not including transportation equipment	**73**	**29,247**	**944,720**
Agricultural implements	2	2,316	108,022
Cash registers, adding machines, and typewriters	1	7,000	462,473
Electrical machinery, apparatus, and supplies	15	2,286	66,671
Engines, turbines, tractors, and water wheels	2	918	14,405
Foundry and machine-shop products	36	6,099	106,551
Radios and phonographs	8	8,165	170,916
Other	9	2,463	15,680
Transportation equipment	**53**	**54,049**	**718,588**
Automobiles, bodies and parts	36	40,797	390,459
Cars, electric- and steam-railroad	2	780	8,113
Shipbuilding	15	12,472	320,016
Nonferrous metals and their products	**31**	**9,525**	**152,703**
Aluminum manufactures	2	1,239	9,391
Brass, bronze, and copper products	4	3,550	30,625
Clocks and watches and time-recording devices	2	322	1,874
Jewelry	3	151	1,632
Lighting equipment	1	556	2,780
Silverware and plated ware	4	799	21,267
Smelting and refining—copper, lead, and zinc			2,625
Stamped and enameled ware	10	1,606	44,730
Other	5	1,302	37,779
Lumber and allied products	**143**	**38,270**	**1,019,284**
Furniture	60	7,744	261,389
Millwork and planing	15	3,544	73,838
Sawmills and logging camps	39	18,502	507,112
Other	29	8,480	176,945
Stone, clay, and glass products	**39**	**24,689**	**723,522**
Brick, tile, and terra cotta	4	817	43,525
Cement	3	670	1,880
Glass	18	21,268	608,222
Marble, granite, slate, and other products	3	151	2,151
Pottery	1	706	47,186
Other	10	1,077	20,558
Textiles and their products	**455**	**128,573**	**2,777,498**
Fabrics:			
Carpets and rugs	7	1,209	38,925
Cotton goods	29	17,029	554,952
Cotton small wares	4	120	1,809
Dyeing and finishing textiles	18	5,351	179,511
Silk and rayon goods	65	11,047	411,767
Woolen and worsted goods	27	6,940	157,066
Other	18	2,183	87,924
Wearing apparel:			
Clothing, men's	31	3,685	29,852
Clothing, women's	126	19,889	263,167
Corsets and allied garments	2	65	1,660
Men's furnishings	10	2,665	33,497
Hats, caps, and millinery	23	25,963	162,775
Shirts and collars	16	3,344	112,237
Hosiery	32	14,148	480,091
Knit goods	28	11,610	217,874
Other	19	3,330	44,391
Leather and its manufactures	**72**	**20,472**	**218,996**
Boots and shoes	44	11,885	83,994
Leather	10	5,965	62,980
Other leather goods	18	2,622	72,022
Food and kindred products	**106**	**13,859**	**244,718**
Baking	43	2,786	82,782
Beverages	10	891	8,498
Butter	1	11	176
Canning and preserving	11	3,437	17,200
Confectionery	8	589	8,650
Flour and grain mills	8	2,421	48,269

Table 3.—Strikes in 1936, by Industries—Continued

Industry	Number of strikes beginning in 1936	Number of workers involved	Man-days idle during 1936
Food and kindred products—Continued.			
Ice cream	2	28	268
Slaughtering and meat packing	18	2,905	73,059
Sugar refining, cane	1	702	5,610
Other	4	89	206
Tobacco manufactures	6	1,090	12,573
Cigars	6	1,090	12,573
Paper and printing	47	5,203	191,068
Boxes, paper	13	2,932	91,575
Paper and pulp	7	671	12,840
Printing and publishing:			
Book and job	8	270	4,687
Newspapers and periodicals	10	808	62,919
Other	9	522	19,047
Chemicals and allied products	20	13,990	230,766
Chemicals	4	1,378	31,144
Explosives	1	30	870
Fertilizers	1	38	342
Paint and varnishes	3	615	13,398
Petroleum refining	4	2,521	61,935
Rayon and allied products	2	8,905	114,715
Other	5	503	8,362
Rubber products	43	76,699	477,286
Rubber tires and inner tubes	22	70,571	443,700
Other rubber goods	21	6,128	33,586
Miscellaneous manufacturing	76	9,536	211,069
Electric light, power, and manufactured gas	9	904	11,142
Broom and brush	3	157	2,047
Furriers and fur factories	19	2,529	70,212
Other	45	5,946	127,668
Extraction of minerals	83	56,063	1,237,470
Coal mining, anthracite	26	23,073	264,545
Coal mining, bituminous	38	19,648	533,314
Metalliferous mining	9	6,959	247,528
Quarrying and nonmetallic mining	7	6,274	191,043
Other	3	109	1,040
Transportation and communication	165	83,231	2,095,435
Water transportation	79	68,761	1,961,267
Motortruck transportation	55	9,235	75,953
Motorbus transportation	12	920	10,144
Taxicabs and miscellaneous	13	3,460	23,561
Electric railroad	1	60	240
Steam railroad	2	587	22,870
Radio broadcasting and transmitting	1	12	912
Other	2	196	488
Trade	164	30,532	326,749
Wholesale	51	6,637	115,798
Retail	113	23,895	210,951
Domestic and personal service	116	72,246	861,114
Hotels, restaurants, and boarding houses	49	2,141	36,283
Personal service, barbers, beauty parlors	8	24,805	289,960
Laundries	26	1,519	63,538
Dyeing, cleaning, and pressing	18	4,469	52,516
Elevator and maintenance workers (when not attached to specific industry)	12	39,081	417,094
Other	3	231	1,723
Professional service	24	1,052	14,394
Recreation and amusement	13	766	6,115
Professional	3	86	879
Semiprofessional, attendants, and helpers	8	200	7,400
Building and construction	230	33,225	345,351
Buildings, exclusive of P. W. A.	111	22,355	180,208
All other construction (bridges, docks, etc., and P. W. A. buildings)	119	10,870	165,143
Agriculture, etc.	42	21,046	348,804
Agriculture	28	15,369	259,120
Fishing	14	5,677	89,684
W. P. A., relief, and resettlement projects	80	40,016	232,216
Other nonmanufacturing industries	34	2,920	29,042
General strike	1	1,500	4,500

States Affected

MORE than one-third of the 2,172 strikes in 1936 were in New York and Pennsylvania. The number of strikes in these States was 393

and 365 respectively. California experienced 194 strikes during the year, Ohio 177, New Jersey 126, and Massachusetts 111. The strikes in these six States constituted more than 60 percent of the strikes throughout the country.

Table 4.—Strikes in 1936, by States

State	Number of strikes beginning in 1936	Workers involved			Man-days idle during 1936	
		Number	Percent of total	Average per strike	Number	Percent of total
All States	[2] 2,172	788,648	100.0	363	13,901,956	100.0
Alabama	31	10,126	1.3	327	278,674	2.0
Arizona	2	940	.1	470	1,880	(1)
Arkansas	4	2,825	.4	706	64,602	.5
California	194	70,027	8.9	361	2,038,101	14.7
Colorado	8	1,707	.2	213	13,084	.1
Connecticut	45	9,435	1.2	210	178,674	1.3
Delaware	6	249	(1)	42	2,823	(1)
District of Columbia	16	1,231	.2	77	22,474	.2
Florida	7	1,491	.2	213	13,864	.1
Georgia	10	2,558	.3	256	64,850	.5
Idaho	5	2,617	.3	523	123,375	.9
Illinois	98	24,094	3.1	246	409,748	2.9
Indiana	34	11,726	1.5	345	153,596	1.1
Iowa	10	1,210	.2	121	45,297	.3
Kansas	5	265	(1)	53	998	(1)
Kentucky	9	1,305	.2	145	358,713	2.6
Louisiana	17	3,082	.4	181	31,858	.2
Maine	7	831	.1	119	5,811	(1)
Maryland	27	19,131	2.4	709	203,300	1.5
Massachusetts	111	34,193	4.3	308	432,223	3.1
Michigan	45	26,986	3.4	600	214,182	1.5
Minnesota	54	14,214	1.8	263	249,744	1.8
Mississippi	3	285	(1)	95	2,800	(1)
Missouri	35	9,821	1.2	281	158,194	1.1
Montana	6	1,215	.2	203	10,628	.1
Nebraska	5	290	(1)	58	1,715	(1)
Nevada	3	169	(1)	56	247	(1)
New Hampshire	5	1,093	.1	219	13,288	.1
New Jersey	126	30,024	3.8	238	560,953	4.0
New Mexico	4	885	.1	221	35,165	.3
New York	393	160,734	20.5	409	1,943,992	14.0
North Carolina	13	5,319	.7	409	85,707	.6
North Dakota	4	647	.1	162	1,878	(1)
Ohio	177	124,803	15.9	705	1,742,788	12.5
Oklahoma	6	871	.1	145	40,396	.3
Oregon	53	16,009	2.0	302	391,174	2.8
Pennsylvania	365	118,204	15.0	324	2,016,541	14.5
Rhode Island	27	5,810	.7	215	82,289	.6
South Carolina	16	4,445	.6	278	257,375	1.9
Tennessee	23	2,760	.3	120	62,322	.4
Texas	38	7,058	.9	186	93,641	.7
Utah	4	3,382	.4	846	136,995	1.0
Vermont	3	168	(1)	56	57,044	.4
Virginia	7	1,659	.2	237	8,311	.1
Washington	82	28,073	3.6	342	846,825	6.1
West Virginia	30	7,333	.9	244	140,968	1.0
Wisconsin	50	16,417	2.1	328	233,200	1.7
Wyoming	3	800	.1	267	12,120	.1
Interstate (unable to determine number of workers in each State)	[2] 2	131	(1)	66	57,529	.4

[1] Less than 1/10 of 1 percent.

[2] The sum of this column is more than 2,172. This is due to the fact that 33 strikes which extended across State lines have been counted as separate strikes in each State affected, with the proper allocation of number of workers involved and man-days idle. In 2 strikes it was impossible to allocate accurately the workers and man-days to the various States into which the strikes extended.

The greatest number of workers involved in strikes in any State during the year was in New York, where 160,734 were involved. There were 124,803 workers involved in strikes in Ohio, 118,204 in Pennsylvania, and 70,027 in California. Approximately 60 percent of the total number of workers involved in all strikes during the year was in these four States.

California experienced the greatest number of man-days of idleness because of strikes during 1936. This was due principally to the maritime strike along the West coast, which began in October and continued into 1937.

Cities Affected

THERE were more than twice as many strikes in New York as in any other city of the United States in 1936. New York, with 287 strikes, was followed by Philadelphia with 102, San Francisco with 76, Los Angeles with 50, and Akron with 43. With the exception of New York, and excluding the effect of intercity strikes as explained below, there were more workers involved in strikes and more man-days of idleness in Akron than in any other city in 1936. This was due principally to a few large strikes in the rubber industry.

Table 5.—Strikes in 1936 in Cities Which Had 10 or More Strikes in Any Year From 1927 to 1936

City	Number of strikes beginning in 1936	Number of workers involved	Man-days idle during 1936	City	Number of strikes beginning in 1936	Number of workers involved	Man-days idle during 1936
Akron	43	70,797	488,346	Milwaukee [1]	24	4,512	60,360
Allentown	5	811	11,114	Minneapolis [1]	30	5,230	194,642
Baltimore [1]	15	2,961	33,887	Newark, N. J. [1]	7	888	12,073
Birmingham	3	1,455	5,005				
Boston [1]	17	7,226	63,504	New Bedford [1]	7	1,852	38,684
				New York (Greater) [1]	287	128,644	1,368,813
Buffalo [1]	13	1,683	36,815	Paterson, N. J. [1]	14	2,302	26,508
Chattanooga	2	123	1,701	Philadelphia [1]	102	31,901	347,198
Chicago	39	3,221	66,418	Pittsburgh [1]	16	3,256	54,807
Cincinnati	7	600	7,506				
Cleveland [1]	39	13,918	124,926	Portland, Oreg. [1]	31	3,632	75,294
				Providence [1]	10	2,070	30,474
Columbus	2	489	23,705	Reading	6	5,784	153,144
Detroit [1]	18	12,603	102,690	Rochester	10	3,941	36,662
Easton, Pa. [1]	14	1,586	144,254	St. Louis [1]	20	2,369	26,311
Elizabeth, N. J. [1]	8	2,200	24,739				
Erie	3	92	1,909	San Francisco (bay area) [1]	76	18,882	422,737
				Seattle [1]	21	2,775	105,698
Fall River, Mass. [1]	9	4,010	49,631	Scranton, Pa.	5	681	8,266
Haverhill				Terre Haute, Ind.	2	114	765
Houston [1]	11	1,056	14,467	Toledo [1]	22	4,811	117,561
Jersey City [1]	5	812	3,632				
Kansas City, Mo.	2	2,472	24,940	Washington, D. C.	16	1,231	22,474
				Woonsocket [1]	7	1,437	19,243
Los Angeles [1]	50	10,502	239,497	Worcester, Mass.	4	93	4,083
Lynn [1]	11	3,638	25,464	York, Pa. [1]	2	88	354

[1] In addition to the figures shown, this city was also affected by 1 or more strikes which extended into 2 or more cities. It was not possible accurately to determine how many workers involved in these intercity strikes were employed in each of the cities affected, hence the figures in this table are exclusive of intercity strikes.

In table 5, figures on 1936 strikes are given for each city which has had as many as 10 strikes in any one of the last 10 years. The figures given for each city include only the strikes which were confined to that city. As indicated by the footnote to table 5, many of the cities were also affected by intercity strikes, some of which were widespread and extended even across State lines. The statistical information at hand does not permit further subdivision of these intercity strikes and an allocation of the workers and man-days to the various cities affected.

Number of Workers

More than half of the strikes beginning in 1936 involved fewer than 100 workers each. The average for all strikes was 363 workers. The 8 strikes in each of which 10,000 or more workers were involved were: A strike of millinery workers in New York City in February, two strikes at the Goodyear Tire & Rubber Co. plants in Akron, Ohio (one in February and the other in June), the two maritime strikes late in 1936 (one on the west coast and the other on the Atlantic and Gulf coasts), a strike of building-service employees in March, a strike of barber-shop workers in April, and a strike of painters in August. All of the last three strikes were in New York City.

Table 6.—Strikes Beginning in 1936, Classified by Number of Workers Involved

Industry group	Total	Number of strikes in which the number of workers involved was—						
		6 and under 20	20 and under 100	100 and under 500	500 and under 1,000	1,000 and under 5,000	5,000 and under 10,000	10,000 and over
All industries	2,172	392	840	652	158	102	20	8
Manufacturing								
Iron and steel and their products, not including machinery	69	7	20	33	6	2	1	.....
Machinery, not including transportation equipment	73	8	27	30	3	3	2	.....
Transportation equipment	53	2	15	14	7	12	3	.....
Railroad repair shops	.....	.....	.....	.....	.....	.....	.....	.....
Nonferrous metals and their products	31	2	15	7	4	3	.....	.....
Lumber and allied products	143	22	48	51	18	3	1	.....
Stone, clay, and glass products	39	3	13	14	5	2	2	.....
Textiles and their products	455	58	189	160	28	18	1	1
Leather and its manufactures	72	10	25	24	7	6	.....	.....
Food and kindred products	106	30	42	27	5	2	.....	.....
Tobacco manufactures	6	2	1	3	.....	.....	.....	.....
Paper and printing	47	11	21	12	3	.....	.....	.....
Chemicals and allied products	20	1	6	10	1	1	1	.....
Rubber products	43	1	7	16	6	6	5	2
Miscellaneous manufacturing	76	14	36	21	4	1	.....	.....
Nonmanufacturing								
Extraction of minerals	83	1	15	34	22	9	2	.....
Transportation and communication	165	31	76	44	8	4	.....	2
Trade	164	65	56	29	7	6	1	.....
Domestic and personal service	116	45	45	18	2	4	.....	2
Professional service	24	11	10	3	.....	.....	.....	.....
Building and construction	230	53	117	50	6	3	.....	1
Agriculture, etc	42	1	11	18	6	6	.....	.....
W. P. A., relief, and resettlement projects	80	6	25	29	9	10	1	.....
Other nonmanufacturing industries	34	8	20	5	1	.....	.....	.....
General	1	.....	.....	.....	.....	1	.....	.....

Duration

THE average duration of the strikes which ended in 1936 was 23.3 calendar days. Approximately 35 percent of them lasted less than a week and 60 percent were terminated in less than one-half month after they began. Only 5 percent lasted as long as 3 months. The longest strikes, on the average, were in the mining industries (36 calendar days) and the shortest strikes, on the average, were in the rubber-products industries (7.5 calendar days).

Table 7.—Duration of Strikes Ending in 1936

Industrial group	Total strikes	Average duration (calendar days)	Number of strikes with duration of—					
			Less than 1 week	1 week and less than ½ month	½ and less than 1 month	1 and less than 2 months	2 and less than 3 months	3 months or more
All industries	2,156	23.3	753	512	382	291	106	112
Manufacturing								
Iron and steel and their products, not including machinery	67	26.1	11	25	14	9	5	3
Machinery, not including transportation equipment	67	24.4	13	22	15	10	4	3
Transportation equipment	50	33.8	12	11	6	10	6	5
Nonferrous metals and their products	33	28.7	9	6	5	8	3	2
Lumber and allied products	143	31.3	25	25	40	33	10	10
Stone, clay, and glass products	37	23.7	10	8	12	3	3	1
Textiles and their products	457	28.7	122	114	89	68	27	37
Leather and its manufactures	67	16.4	26	17	12	8	3	1
Food and kindred products	107	22.8	40	25	18	14	4	6
Tobacco manufactures	5	15.6	2	-------	3	-------	-------	-------
Paper and printing	49	32.8	10	13	9	9	3	5
Chemicals and allied products	19	23.4	4	5	5	4	-------	1
Rubber products	43	7.5	31	7	2	3	-------	-------
Miscellaneous manufacturing	75	19.1	19	21	19	13	2	1
Nonmanufacturing								
Extraction of minerals	85	36.0	37	16	11	5	5	11
Transportation and communication	164	15.0	96	34	12	11	5	6
Trade	163	19.9	66	30	31	24	7	5
Domestic and personal service	114	24.5	48	19	17	15	7	8
Professional service	23	15.5	10	8	-------	4	1	-------
Building and construction	228	20.1	76	64	44	31	7	6
Agriculture, etc	43	15.4	22	8	5	5	3	-------
W. P. A., relief, and resettlement projects	81	8.4	42	28	8	3	-------	-------
Other nonmanufacturing industries	35	14.5	21	6	5	1	1	1
General	1	3.0	1	-------	-------	-------	-------	-------

Causes

IN APPROXIMATELY half of the strikes ending in 1936, in which an equal proportion of the workers were involved, the major issues were union recognition, discrimination, or other union organization matters. "Recognition, wages, and hours" was the most common combination of issues. In 35 percent of the strikes, involving a like proportion of workers, the major issues were wages and hours with demands for wage increases predominating.

The 2,156 strikes which ended in 1936 are classified in table 8 according to the major issues involved. The "other" group at the

end of the table includes strikes over delayed pay, unsafe and unsanitary working conditions, protests against certain foremen or supervisors, and all miscellaneous demands and grievances not properly classifiable under the other headings.

Table 8.—Major Issues Involved in Strikes Ending in 1936

Major issues	Strikes		Workers involved	
	Number	Percent of total	Number	Percent of total
All issues	2,156	100.0	709,748	100.0
Wages and hours	756	35.1	250,672	35.3
Wage increase	413	19.1	142,663	20.1
Wage decrease	151	7.0	45,031	6.3
Wage increase, hour decrease	146	6.8	37,178	5.2
Wage decrease, hour increase	19	.9	2,665	.4
Hour increase	15	.7	17,676	2.5
Hour decrease	12	.6	5,459	.8
Union organization	1,083	50.2	365,019	51.4
Recognition	173	8.0	47,347	6.7
Recognition and wages	272	12.6	103,521	14.6
Recognition and hours	7	.3	325	(1)
Recognition, wages, and hours	357	16.6	120,820	17.0
Closed shop	130	6.0	42,543	6.0
Violation of agreement	24	1.1	24,444	3.4
Discrimination	120	5.6	26,019	3.7
Miscellaneous	317	14.7	94,057	13.3
Sympathy	25	1.2	4,976	.7
Rival unions or factions	2	.1	4,040	.6
Jurisdiction	37	1.7	4,236	.6
Other	251	11.6	80,647	11.4
Not reported	2	.1	158	(1)

[1] Less than 1/10 of 1 percent.

Results

THE difficulties in determining the net results of a strike or lock-out in terms of success or failure are obvious to anyone familiar with the many complex factors involved. The only approach is a comparison of the terms of settlement with the demands or aims of the parties initiating the stoppage of work. Such a comparison can only be approximate, since, for strategic purposes, each of the opposing parties may demand much more than it expects or hopes to obtain. An attempt has been made in each case to determine the basic and underlying issues in the dispute and then to compare the terms of settlement with these issues or demands.

Table 9.—Results of Strikes Ending in 1936

Results	Strikes		Workers involved	
	Number	Percent of total	Number	Percent of total
Total	2,156	100.0	709,748	100.0
Substantial gains to workers	991	45.9	288,952	40.7
Partial gains or compromises	508	23.6	254,751	35.9
Little or no gains to workers	592	27.5	120,288	16.9
Jurisdiction, rival unions, or factions	39	1.8	8,276	1.2
Indeterminate	22	1.0	36,879	5.2
Not reported	4	.2	602	.1

Almost 46 percent of the strikes ending in 1936, including 41 percent of the workers involved, resulted in the workers obtaining substantially all of their basic demands. Nearly 24 percent of the strikes, including 36 percent of the workers, resulted in partial gains or compromises, and 27½ percent of the strikes, including 17 percent of the workers, resulted in little or no gains to the workers.

Table 10.—Results of Strikes Ending in 1936 in Relation to Major Issues Involved

Major issues	Total	Strikes resulting in—					
		Substantial gains to workers	Partial gains or compromises	Little or no gains to workers	Jurisdiction, rival union, or faction settlements	Indeterminate	Not reported
	Number of strikes						
All issues	2,156	991	508	592	39	22	4
Wages and hours	756	347	205	201		3	
Wage increase	413	195	117	100		1	
Wage decrease	151	49	38	63		1	
Wage increase, hour decrease	146	81	42	23			
Wage decrease, hour increase	19	6	5	8			
Hour increase	15	10	2	3			
Hour decrease	12	6	1	4		1	
Union organization	1,083	540	237	296		8	2
Recognition	173	72	17	81		3	
Recognition and wages	272	136	81	55			
Recognition and hours	7	4		3			
Recognition, wages, and hours	357	199	91	64		3	
Closed shop	130	68	24	37			1
Violation of agreement	24	16	5	3			
Discrimination	120	45	19	53		2	1
Miscellaneous	317	104	66	95	39	11	2
Sympathy	25	9	5	5		6	
Rival unions or factions	2				2		
Jurisdiction	37				37		
Other	251	95	61	89		5	1
Not reported	2			1			1
	Number of workers involved						
All issues	709,748	288,952	254,751	120,288	8,276	36,879	602
Wages and hours	250,672	94,717	110,472	43,781		1,702	
Wage increase	142,663	53,587	66,506	22,493		77	
Wage decrease	45,031	15,407	14,160	15,339		125	
Wage increase, hour decrease	37,178	6,170	28,176	2,832			
Wage decrease, hour increase	2,665	487	1,201	977			
Hour increase	17,676	16,787	409	480			
Hour decrease	5,459	2,279	20	1,660		1,500	
Union organization	365,019	169,522	120,812	55,057		19,158	470
Recognition	47,347	17,668	5,144	9,628		14,907	
Recognition and wages	103,521	54,165	31,970	17,386			
Recognition and hours	325	226		99			
Recognition, wages, and hours	120,820	53,085	59,510	7,724		501	
Closed shop	42,543	13,107	13,836	15,230			370
Violation of agreement	24,444	16,967	7,344	133			
Discrimination	26,019	14,304	3,008	4,857		3,750	100
Miscellaneous	94,057	24,713	23,467	21,450	8,276	16,019	132
Sympathy	4,976	1,240	1,339	175		2,222	
Rival unions or factions	4,040				4,040		
Jurisdiction	4,236				4,236		
Other	80,647	23,473	22,128	21,237		13,797	12
Not reported	158			38			120

The results of the strikes ending in 1936 are shown in table 10 in relation to the major issues involved. This table indicates that the workers striking over union-organization matters were slightly more successful than those striking over wage-and-hour issues where no union organization questions were involved. Where wages and hours were the major issues, the workers won their demands in 46 percent of the strikes, obtained compromises in 27 percent, and lost in 27 percent. Where union-organization matters were the major issues, they won their demands in 50 percent of the strikes, obtained compromises in 22 percent, and lost in 27 percent. Of the workers involved in strikes over wage and hour issues, 38 percent won their demands, 44 percent obtained compromises, and 17½ percent lost; of those striking over union-organization matters, 46 percent won their demands, 33 percent obtained compromises, and 15 percent lost. Where the issues were miscellaneous matters other than wages and hours or union organization, the workers who won, lost, and obtained compromises were about equal in number.

Methods of Negotiating Settlements

SETTLEMENTS of 43 percent of the strikes, including about an equal proportion of the workers involved, were negotiated directly by the employers and representatives of the organized workers. In about 30 percent of the strikes, including 41 percent of the workers involved, the parties were assisted by Government conciliators or labor boards in working out settlements of their disputes. In most of these cases the workers were represented by union officials. Of these 644 cases, 611 were settled by conciliation or mediation methods and 33 were settled by arbitration. Private conciliators or arbitrators were instrumental in negotiating settlements of 66, or 3 percent, of the strikes. Forty-one of these were settled by conciliation methods and 25 by arbitration.

Table 11.—Methods of Negotiating Settlements of Strikes Ending in 1936

Negotiations toward settlements carried on by—	Strikes		Workers involved	
	Number	Percent of total	Number	Percent of total
Total	2,156	100.0	709,748	100.0
Employers and workers directly	114	5.3	17,276	2.4
Employers and representatives of organized workers directly	938	43.4	299,132	42.2
Government conciliators or labor boards	644	29.9	292,600	41.2
Private conciliators or arbitrators	66	3.1	20,348	2.9
Terminated without formal settlement	394	18.3	80,392	11.3

There were no formal settlements of 394, or 18 percent, of the strikes terminated during 1936. In most of these cases the workers simply

dropped their demands and returned to work without settlements or they lost their jobs when employers went out of business or hired new workers to fill the places of the strikers.

Labor Organizations Involved

UNIONS affiliated with the American Federation of Labor were involved in more than three-fourths of the strikes which ended in 1936. Independent organizations were involved in 7.4 percent of the strikes. Unions affiliated with the Committee for Industrial Organization were involved in 133 (6.2 percent) strikes after the time of their suspension by the American Federation of Labor in September.

The unions indicated did not in all cases officially call the strikes. Some of the strikes were unauthorized by union officials, although after the workers were out the unions assisted in negotiating settlements. In some cases the workers were unorganized when the strikes began and the unions stepped in and offered leadership and assistance in settling the disputes, as a means of organizing the workers. In table 12 the union which identified itself with the strike, either at the beginning or later, is regarded as the organization involved.

Table 12.—Strikes Ending in 1936 by Types of Labor Organizations Involved

Labor organization involved	Strikes		Workers involved	
	Number	Percent of total	Number	Percent of total
Total	2,156	100.0	709,748	100.0
American Federation of Labor [1]	1,649	76.4	488,643	68.8
Committee for Industrial Organization [2]	133	6.2	105,814	14.9
Railroad brotherhoods	2	.1	560	.1
Independent	159	7.4	75,183	10.6
American Federation of Labor and another	2	.1	4,040	.6
Company unions	10	.5	1,743	.2
Organization involved but type not reported	7	.3	360	.1
No organization	183	8.5	32,941	4.6
Not reported as to whether or not any organization was involved	11	.5	464	.1

[1] Does not include strikes after September 1936, of unions suspended by the American Federation of Labor. See footnote 2.

[2] Includes the 10 international unions suspended by the American Federation of Labor because of affiliation with the C. I. O. and independent unions which affiliated with the C. I. O. The figures include only the strikes occurring after the date of the A. F. of L. convention in September.

Sit-Down Strikes During 1936

SO-CALLED "sit-down" or "stay-in" strikes seem to fall into five groups: [2]

(1) A stoppage for a few moments or a few hours until a specific grievance is settled, at which time work is resumed.

(2) A stoppage by a group of workers which arouses sentiment for a general walk-out. The general walk-out thereupon develops into a regular picketing strike.

[2] Many sit-down strikes are difficult to distinguish from regular picket strikes. This is especially true in the outdoor trades. When longshoremen or building-construction workers stay around their workplaces but do no work, it is a question whether such action should be classified as picketing or sit-down strikes.

(3) A sit-down for a few hours, when the employer forces the employees out and closes the plant. This dispute thereupon assumes the nature of a lock-out.

(4) A procedure whereby dissatisfied employees report for work each day or shift but sit at their places and refuse to work. They go home at the end of each shift.

(5) A stay-in strike, in which a portion or all of the strikers stay in the plant overnight.

In 48 of the 2,172 strikes which began in 1936, the strikers stayed in the plants for 1 day or longer after quitting work. In some of these cases the disputes were settled by the close of the day and work was resumed the following day. In others, workers were ejected or walked out at the close of the shift and set up picket lines around the plants until the disputes were adjusted. In 22 instances the strikers stayed in the building one or more nights. Usually the "stay-in" was only a night or two. Some, however, lasted a week or more. In one case the strikers stayed in the plant for 8 weeks.

About 53,250 workers were involved in the 24 strikes in which workers sat at their places for 1 day but did no work. Approximately 381,000 man-days of idleness resulted from these strikes. In the 22 stay-in-strikes lasting more than 1 day, 34,565 workers were involved and 290,000 man-days of work were lost during the entire progress of the strikes. This does not mean that all these man-days of idleness were spent within the plant. In most cases only a portion of the workers actually stayed in the plant. Also, in many instances, the stay-in lasted only a few days, although the strike continued for a longer period.

Of these 48 stay-in strikes lasting 1 day or longer, 1 was called by a company union, in 1 the workers were unorganized, and 3 were called by independent or unaffiliated unions. In 8 instances the strikers were members of unions affiliated with the American Federation of Labor, and in 35 cases by unions affiliated with the Committee for Industrial Organization. Matters of union organization, such as recognition, discrimination, wearing of union buttons, etc., were the major factors causing most of these stay-in strikes. Few of them were formally authorized by the unions, although after they were started the unions endorsed them and assisted in getting settlements.

In addition to the strikes in which workers stayed at their places but did no work for 1 day or longer, there were numerous such stoppages lasting from a few moments to several hours. The exact number of such stoppages is not known, since the Bureau of Labor Statistics keeps no record of strikes lasting less than 1 day. A number occurred in the garment trades, when disputed piece-work rates on new styles of work were being adjusted. Longshoremen, especially on the west coast, engaged in what they called "quickie" strikes when they were dissatisfied with certain working conditions. There were a number in

the rubber industry. One rubber concern in Akron reported having had over 50 such stoppages, lasting from 15 minutes to several hours. A large proportion of these brief sit-downs were due to union workers' suspicions that they were being discriminated against, or that nonunion members were being given special consideration.

Strikes and Lock-Outs in Canada, 1936[1]

THE number of strikes and lock-outs in Canada in 1936 was 156—an increase of 36 over the previous 12 months. The increase in the number of workers involved was not great, however, and the working days lost in 1936 were 7,031 less than in 1935. In 1936 the time loss for disputes in coal mining was less than in either of the 2 preceding years but greater than in 1929, 1930, 1931, or 1933. The industries for which the greatest time loss was reported for 1936 were textile and clothing manufacture, fur and leather-products manufacture, mining, logging, and fishing.

The above data and the statistics in the following table are taken from the Canadian Labor Gazette of March 1937.

Strikes and Lock-Outs in Canada, 1917 to 1936

Year	Number of disputes—		Disputes in progress in year		
	In progress in year	Beginning in year	Number of employees involved	Total number of workers involved	Time lost (in man-days)
1917	160	158	758	50,255	1,123,515
1918	230	228	782	79,743	[1] 847,942
1919	336	332	1,967	148,915	3,400,942
1920	322	310	1,374	60,327	799,524
1921	168	159	1,208	28,257	1,048.914
1922	104	89	732	43,775	1,528,661
1923	86	77	450	34,261	671,750
1924	70	64	435	34,310	1,295,054
1925	87	86	497	28,949	1,193,281
1926	77	75	512	23,834	266,601
1927	74	72	480	22,299	152,570
1928	98	96	548	17,581	224,212
1929	90	88	263	12,946	152,080
1930	67	67	338	13,768	91,797
1931	88	86	266	10,738	204,238
1932	116	111	497	23,390	255,000
1933	125	122	617	26,558	317,547
1934	191	189	1,100	45,800	574,519
1935	120	120	719	33,269	[2] 284,028
1936	156	155	709	34,812	276,997

[1] As reported in the Canadian Labor Gazette of February, 1935 and 1936.
[2] Probably a revision of the figure (288,703) reported in Canadian Labor Gazette of February 1936.

The principal disputes involved textile workers at Cornwall, Ontario; loggers and saw and shingle mill workers in Vancouver Island and in the coast district on the British Columbia mainland;

cotton-factory workers at Three Rivers, Quebec; fur workers at Winnipeg, Manitoba; coal miners at New Waterford, New Aberdeen, and Glace Bay, Nova Scotia; cotton mill workers at Welland, Ontario; Montreal taxi drivers; and salmon fishermen at Rivers Inlet, British Columbia.

As in the previous year, a large proportion of the disputes involved relatively small numbers of persons and little loss of time. A feature of 1936 was the larger percentage of disputes over such matters as union recognition and discharge of workers for union membership or activity, the controversies arising from these questions for the first time exceeding those concerned with wages and working conditions.

LABOR AGREEMENTS

Union Agreement With United States Steel Corporation

ON MARCH 2, 1937, an agreement was signed by the Carnegie-Illinois Steel Corporation, largest subsidiary of the United States Steel Corporation, and the Steel Workers' Organizing Committee, acting for the Amalgamated Association of Iron, Steel, and Tin Workers. Further negotiations between the parties resulted in the signing on March 17 of a union agreement covering detailed working conditions. The Carnegie-Illinois agreements were followed by similar agreements signed by other United States Steel subsidiaries.

Provisions of Agreements

THE preliminary agreement recognizes the Amalgamated Association as the bargaining agent for its members employed by the corporation and prohibits discrimination and coercion for union activity. The union in turn agrees not to coerce workers into joining and not to solicit membership on company time or property. The 8-hour day and the 40-hour week are established in the industry for the first time, and time and a half must be paid for all work in excess of these maximum limitations. A wage increase of 10 cents an hour is provided for classifications previously paying $4.20 a day or less. The agreement also provides for a joint committee to effectuate "a written legal agreement on working conditions, application of wage rates, hours, rules, and a method for adjudicating disputes arising under the terms of the agreement."

The agreement of March 17, signed after a week of negotiations, includes the union recognition, wage, and hour provisions of the preliminary agreement. The 10-cent increase is applied to all other hourly rates and an equivalent increase is provided for tonnage and piece rates. Inequities in individual rates are made a subject for local joint adjustment. On July 4, Labor Day, and Christmas, work is prohibited except in continuous-process operations. One week's vacation with pay is granted to each union member with 5 years of continuous service with the corporation. The vacation pay is to be the average paid during the two pay periods preceding the vacation, but for not less than 40 hours of working time per week nor more than 48 hours.

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Seniority is to govern in promotion, lay-off, and reemployment, when the following factors are relatively equal: Knowledge, training, ability, skill, and efficiency; physical fitness; family status, number of dependents; and place of residence. Seniority is defined as the length of an employee's continuous service with the corporation.

While the management is recognized as vested with the exclusive right to direct the working force in all matters, a definite procedure is established for the adjustment of grievances or differences as to interpretation of the agreement. There is to be no stoppage of work, "but an earnest effort shall be made to settle such differences immediately." The aggrieved member of the union is to consult first with his foreman before the grievance may be turned over to the shop committee. The committee must take the matter up with the foreman and superintendent of the department involved and, in case of failure to reach agreement, with the general manager of the plant. If the matter has not been settled, the representatives of the national union are to meet with the executives of the corporation. Final recourse is to an impartial arbitrator who is to be appointed by mutual agreement and whose decision is final and binding. Discharge cases must be taken up and disposed of within 5 days, back pay to be given if reinstatement is jointly determined upon. Other matters are to be considered in periodic meetings between the shop committees and the plant managers.

The shop committees are to be composed of from 3 to 10 members, as agreed upon by the union and plant manager, no more than one representing a single department. Shop-committee members will be given time off without pay for committee meetings and may visit other departments in connection with committee work with the permission of their department superintendent or his representative.

A joint conference is to convene three weeks before the expiration of this agreement, February 28, 1938, to negotiate a new agreement.

Previous Union Experience in the Steel Industry

THESE agreements mark a reversal of labor policy on the part of the United States Steel Corporation, and the first major gain in nearly half a century of intermittent efforts by organized labor in the steel industry. The Amalgamated Association of Iron, Steel, and Tin Workers, formed in 1876 through a merger of existing organizations, was in its early years one of the strongest unions in the country. Its members were skilled workmen in an industry largely dependent on individual craftsmanship. As machine processes became more prevalent, however, the union's original strategic bargaining position was gradually undermined. The union's answer to mechanization—a broadening of the narrow membership base to include unskilled workers—lagged considerably behind the changes in production methods.

The union's first clash with a modern corporation came in 1892 when H. C. Frick, acting for the Carnegie Co., insisted on renewal of the collective agreement on a basis which the union considered impossible to accept. When the company delivered an ultimatum that it would deal with its workers individually if its terms were not accepted, a strike was called. The loss of this Homestead strike broke unionism in the Pittsburgh area and reduced the general membership from 24,000 to about a third of its former strength.

When the United States Steel Corporation was formed in February 1901, some of the acquired plants were under contract with the union, but their agreements carried a stipulation that the union would neither organize employees of other mills nor accept their voluntary applications for membership. A Congressional investigation in 1910 revealed that the corporation, at the time of its formation, had determined upon the following policy with regard to union organization:

> We are unalterably opposed to any extension of union labor and advise subsidiaries to take firm positions when those questions come up and say that they are not going to recognize it, that is, any extension of unions in mills where they do not now exist.[1]

During the summer of 1901 strikes were declared against various subsidiaries of the United States Steel Corporation. Failure of negotiations led to the calling of a strike against all the mills of the corporation, in spite of the fact that this involved violation of agreements in force with some of the mills. The strike was terminated with the signing of 3-year agreements with fewer mills than were under agreements before the strike. Eight years later the few remaining union mills announced they would henceforth operate on a nonunion basis. The strike, lasting more than a year, which followed in 1909–10, resulted in the complete elimination of union agreements in mills of the corporation.

No further effort to organize steel workers was made for nearly a decade. The wartime stimulus to unionization brought about an increase of membership from 4,500 in 1912 to a little more than 16,000 in 1918. In August 1918 a joint national committee for organizing the iron and steel industry was established, composed of one representative from each of the 24 unions which claimed jurisdiction in the industry. After a year of organizing effort, requests for negotiations were presented to employers. The United States Steel Corporation refused to confer and denied the union committee's right to represent its employees. A general strike in the industry was called on September 22, 1919. The union failed to secure conferences with company officials and, before the strike was officially called off on January 8, 1920, many strikers had gone back to work. The joint organizing committee was disbanded by the American Federation of Labor ex-

[1] Report of Investigation of United States Steel Corporation (H. Rept. No. 1127, 62d Cong., 2d sess., p. 128).

ecutive council the following June. Judge Gary's statement of policy, "We do not confer, negotiate with, or combat labor unions as such", had withstood the strongest effort yet made by organized labor to establish itself in the steel industry.

Union membership declined from a peak of 31,500 paid-up members in 1920 to its former proportions, and another period of union inactivity followed. A joint organizing campaign was initiated by 14 unions in 1923, but it collapsed in a few months. The following year the Amalgamated Association asked other unions to relinquish jurisdiction in the industry and help it to organize the workers. As the American Federation of Labor convention endorsed only the second request, the Amalgamated Association did not proceed with its organization plans.

No further organizing plans were considered until the passage of the National Industrial Recovery Act brought about a resurgence of unionism. At its convention in April 1934 the Amalgamated Association voted to strike in June if its bargaining demands were not met by that time. The threatened strike was averted when the President appointed the National Steel Labor Relations Board. The American Federation of Labor convention in 1934 and again in 1935 went on record as favoring an organization campaign in the industry.

In June 1936 the Amalgamated Association of Iron, Steel, and Tin Workers became a member of the Committee for Industrial Organization, which established under its auspices a steel workers' organizing committee with funds contributed by other member unions. It was after 8 months of intense organizing effort by this committee that the agreement recognizing the union was secured, without a strike, from the Carnegie-Illinois Corporation.

LABOR TURN-OVER

Labor Turn-Over in Manufacturing Establishments, February 1937

AN INCREASE in the accession rate and a sharp decline in the separation rate were the principal features of the Bureau of Labor Statistics' survey of labor turn-over in manufacturing industries in February.

As against a total separation rate of 3.38 per 100 workers in January, the rate in February was 2.85, the lowest in 2 years. This decrease was the result of a sharp drop in the lay-off rate and a moderate decline in the quit rate. (See table 1.) The discharge rate, on the other hand, rose from 0.21 per 100 workers in January to 0.22 in February.

The accession rate increased from 4.60 per 100 employees in January to 4.71 in February.

Compared with the corresponding month of last year, the hiring rate in the manufacturing industries covered shows an increase of 59.7 percent. A marked decrease in the lay-off rate more than offset the advances in the quit and discharge rates, and the total separation rate in February was 7 percent below the level of a year ago.

All Manufacturing

THE Bureau of Labor Statistics' survey of labor turn-over covers more than 5,000 representative manufacturing establishments employing nearly 2,400,000 workers in February. The rates represent the number of changes in personnel per 100 employees on the pay rolls during the month.

The rates shown in table 1 are compiled from reports received from representative plants in 144 industries. In the 16 industries for which separate rates are shown (see table 2) reports were received from representative plants employing at least 25 percent of the workers in each industry.

Table 1 shows, for manufacturing as a whole, the total separation rate subdivided into quit, discharge, and lay-off rates, and the accession rate for each month of 1936 and for January and February 1937. The average monthly rates for 1936 are also presented.

Table 1.—Monthly Labor Turn-Over Rates (per 100 Employees) in Representative Factories in 144 Industries

Class of rate and year	January	February	March	April	May	June	July	August	September	October	November	December	Average
Quit rate:													
1937	1.27	1.19											
1936	.71	.68	0.86	1.16	1.06	1.13	1.15	1.23	1.57	1.29	1.13	1.05	1.09
Discharge rate:													
1937	.21	.22											
1936	.20	.17	.19	.21	.20	.23	.23	.27	.26	.24	.21	.22	.22
Lay-off rate:[1]													
1937	1.90	1.44											
1936	2.66	2.21	1.83	1.92	2.06	1.92	1.84	3.23	1.47	1.72	1.70	2.14	2.06
Total separation rate:													
1937	3.38	2.85											
1936	3.57	3.06	2.88	3.29	3.32	3.28	3.22	4.73	3.30	3.25	3.04	3.41	3.37
Accession rate:													
1937	4.60	4.71											
1936	3.65	2.95	3.97	4.46	4.05	4.49	4.94	4.72	5.09	4.83	4.60	4.41	4.35

[1] Including temporary, indeterminate, and permanent lay-offs.

Sixteen Industries

In addition to the information for manufacturing as a whole, detailed labor turn-over rates are available for 16 separate manufacturing industries.

Employment in plants producing rubber tires appears to have been more stable than in any other of the 16 industries for which separate rates are shown for labor turn-over for the month of February. This industry reported the lowest rates in both separations and accessions. Only in iron and steel, where a lay-off rate of 0.39 was reported, were any of the rates as low as those shown for the tire industry.

The highest accession rate (10.23) was shown in automobile and body manufacturing plants. The sharp increase over the preceding month (from 3.63 to 10.23) was due principally to the settlement of the January strike.

The highest quit rate (4.29) occurred in the automobile parts and equipment industry. The highest discharge rate (0.46) was indicated in the same industry. Seasonal influences were reflected in the high lay-off and total separation rates reported by the slaughtering and meat-packing industry.

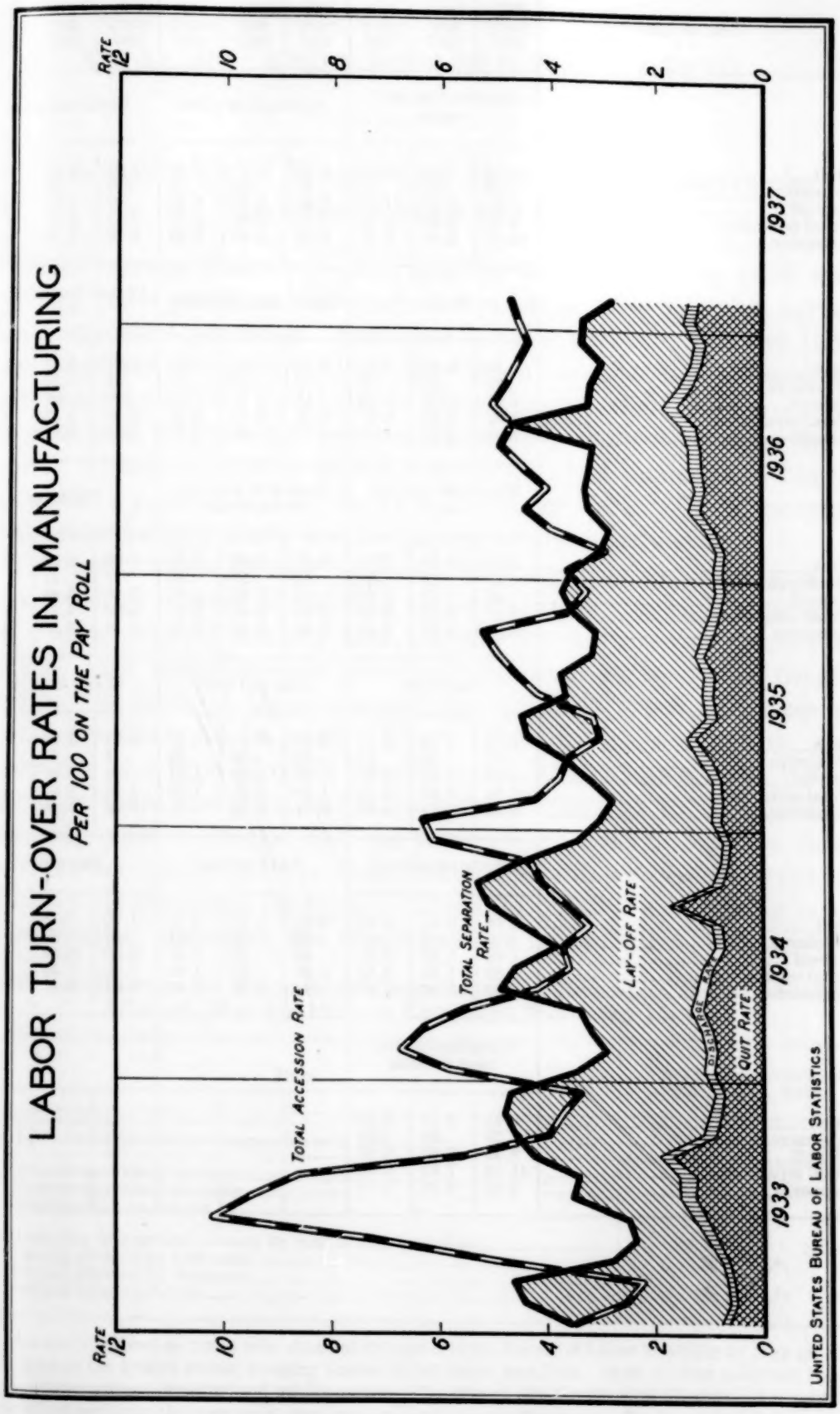
LABOR TURN-OVER RATES IN MANUFACTURING
PER 100 ON THE PAY ROLL
RATE
12
10
8
6
4
2
0
TOTAL ACCESSION RATE
TOTAL SEPARATION RATE
LAY-OFF RATE
DISCHARGE
QUIT RATE
1933
1934
1935
1936
1937
UNITED STATES BUREAU OF LABOR STATISTICS

Table 2.—Monthly Turn-Over Rates (per 100 Employees) in Specified Industries

Class of rates	February 1937	January 1937	February 1936	February 1937	January 1937	February 1936	February 1937	January 1937	February 1936
	Automobiles and bodies			Automobile parts			Boots and shoes		
Quit	1.44	1.40	0.70	4.29	1.91	0.88	1.04	0.98	0.57
Discharge	.19	.30	.15	.46	.53	.34	.32	.21	.19
Lay-off	1.54	5.20	3.29	2.95	5.25	5.46	.99	1.55	1.01
Total separation	3.17	6.90	4.14	7.70	7.69	6.68	2.35	2.74	1.77
Accession	10.23	3.63	3.77	6.69	5.90	2.99	4.07	6.29	2.51
	Bricks			Cigars and cigarettes			Cotton manufacturing		
Quit	1.24	0.65	0.54	3.46	1.77	1.09	1.81	1.68	1.07
Discharge	.25	.13	.13	.09	.26	.23	.28	.30	.26
Lay-off	3.57	5.18	5.80	.46	4.16	1.66	.93	.90	2.56
Total separation	5.06	5.96	6.47	4.01	6.19	2.98	3.02	2.88	3.89
Accession	6.29	5.82	4.61	4.62	5.96	4.16	4.15	4.67	3.18
	Electrical machinery			Foundries and machine shops			Furniture		
Quit	0.96	2.92	0.65	1.56	1.03	0.74	1.09	0.82	0.54
Discharge	.15	.17	.08	.35	.27	.26	.27	.27	.19
Lay-off	.46	.73	2.80	1.05	1.30	1.91	3.46	2.28	2.32
Total separation	1.57	3.82	3.53	2.96	2.60	2.91	4.82	3.37	3.05
Accession	6.34	4.80	2.43	6.86	6.26	3.72	4.34	5.50	3.13
	Hardware			Iron and steel			Men's clothing		
Quit	1.84	1.16	0.52	0.99	0.90	0.67	0.94	1.08	0.65
Discharge	.40	.28	.11	.09	.09	.08	.13	.07	.13
Lay-off	1.30	1.82	1.85	.39	2.22	1.24	.89	1.80	1.35
Total separation	3.54	3.26	2.48	1.47	3.21	1.99	1.96	2.95	2.13
Accession	6.08	6.12	3.02	5.04	3.55	1.67	3.79	5.88	3.21
	Petroleum refining			Rubber tires			Sawmills		
Quit	0.64	0.41	0.42	0.61	0.59	0.37	1.70	1.18	1.13
Discharge	.10	.08	.13	.08	.10	.04	.26	.27	.29
Lay-off	1.08	1.05	2.97	.39	.19	1.27	3.30	5.84	3.42
Total separation	1.82	1.54	3.52	1.08	.88	1.68	5.26	7.29	4.84
Accession	2.69	3.16	2.85	1.64	1.36	2.03	9.93	8.37	5.84
	Slaughtering and meat packing								
Quit	0.95	1.10	0.65						
Discharge	.25	.26	.21						
Lay-off	9.92	6.56	8.69						
Total separation	11.12	7.92	9.55						
Accession	5.95	9.36	7.10						

WAGES AND HOURS OF LABOR

Union Scales of Wages and Hours of Motortruck Drivers,[1] May 15, 1936

THE average union rate of wages for truck drivers in 1936 was 72.7 cents per hour. Average hours as provided in union agreements were 48.1 per week. Increases in rates between 1935 and 1936 were obtained by one-third of the union membership covered in both years' surveys. Decreases in rates were received by 4 percent of the members. Hours per week changed very slightly between the 2 years. Almost 6 percent of the membership had increases in hours, but about 7 percent had decreases in hours per week. For 87 percent of the membership there was no change in the hourly scale.

The term "truck drivers" covers a heterogeneous group of occupations, such as drivers of building and excavating trucks, coal trucks, ice trucks, general hauling and transfer trucks, delivery trucks of various and miscellaneous commodities, and express and freight trucks. In each of these occupations different types and sizes of trucks are likely to be used. Every truck-driving occupation, and every size and type of truck usually has a different wage rate. Furthermore there is a great variation between cities as to commodities handled, types of trucks, and the terminology used to describe these different occupations. For these reasons it is impossible to make an intercity classification by types. The data on all truck driving in all cities studied, therefore, are treated as one trade in this study.

Table 1.—Changes in Union-Scale Quotations and Percent of Union Members Affected, May 15, 1936, as Compared With May 15, 1935

Item	Rates per hour	Hours per week
Total number of quotations comparable with 1935	688	688
Number providing increases	220	30
Number providing decreases	36	54
Number with no change	432	604
Total number of members covered by comparable quotations	102,473	102,473
Percent affected by increases	33.6	5.7
Percent affected by decreases	4.0	7.2
Percent with no change	62.4	87.1

[1] This study is based on union rates obtained by agents of the Bureau of Labor Statistics for May 15, 1936, in 57 cities of the United States, covering almost 112,500 union members. Most of these members belong to the International Brotherhood of Teamsters, Chauffeurs, Stablemen and Helpers. Averages are weighted according to the number of members receiving various rates of pay. See Monthly Labor Review, April 1936, for similar reports for 1934 and 1935.

As shown in the statement below, more than 95 percent of the union members had rates of 50 cents or more per hour. About 4 percent had rates of $1 or over, and an equal proportion had rates of under 50 cents.

Average hourly wage rate	$0.727
Percent of members whose rates were—	
Under 30 cents	0.1
30 and under 35 cents	0.2
35 and under 40 cents	0.3
40 and under 45 cents	1.6
45 and under 50 cents	2.1
50 and under 60 cents	15.5
60 and under 70 cents	27.3
70 and under 80 cents	20.1
80 and under 90 cents	16.9
90 cents and under $1	11.5
$1 and under $1.10	3.8
$1.10 and over	0.6
Number of members covered	112,384

A workweek of 48 hours was provided in union agreements for a large proportion (60.5 percent) of the union truck drivers. Slightly over 20 percent worked under agreements providing for a workweek of over 48 hours. Almost 10 percent worked under agreements providing for a 40-hour week.

Average hours per week	48.1
Percent of members whose hours were—	
Under 35	0.2
35	0.5
Over 35 and under 40	–
40	9.9
Over 40 and under 44	–
44	2.0
Over 44 and under 48	6.3
48	60.5
Over 48 and under 54	11.3
54	4.2
Over 54 and under 60	1.4
60	3.3
Over 60	0.4
Number of members covered	112,384

Provisions of Union Agreements [2]

THE 8-hour working day prevailed in most of the union agreements. Some agreements provide as few as 5 hours or as many as 14 hours for certain drivers, and some others provide that more hours may be worked in the summer.

In even fewer agreements were there exceptions to the 6-day week. In a few agreements, the workweek of some classes of drivers was 5, 5½, or 7 days. A uniform 5-day week was provided for in a few

[2] Other than wages and hours described elsewhere.

agreements and a uniform 7-day week in two In a few cases a 5-day week prevails during the summer while a 6-day week is worked during the rest of the year.

Most of the agreements establish a definite range during which work is to be performed. The starting time is commonly 8 a. m., though work may begin as early as 7 a. m. in a number of cases. Except for milk and bakery delivery drivers, earlier starting times are rare. Finishing time, except for the latter group of workers, is generally between 5 and 6 p. m. Frequently earlier starting times are provided for the summer months and later starts are sometimes provided for Saturday work.

Sunday and holiday work.—Work on Sundays is prohibited in only a few of these agreements. While holiday work is more frequently prohibited, the restriction is general only for Labor Day. Occasionally holiday work is prohibited only after a certain hour, usually 9 or 10 a. m. In some agreements a union permit must be secured for any holiday work; in others certain emergency deliveries may be made as long as regular work is not performed. In a few cases, holidays which fall on Saturday or Monday are not to be observed.

Although Sunday work is generally paid for at the usual overtime rate, a higher rate (usually double time) is paid for holiday work in a number of cases. A minimum amount of pay, usually 4 hours, must often be given if any work is performed on such days. Holidays with pay are sometimes granted, but usually for special holidays only, or if at least 3 days have been worked during the week of the holiday.

The holidays generally observed are New Years, Memorial Day, Fourth of July, Labor Day, Thanksgiving, and Christmas. Washington's Birthday, Armistice Day, and Election Day are additional holidays frequently observed, while Columbus Day and Lincoln's Birthday were less frequently considered holidays. Less than these six holidays are observed in only a few cases, the minimum number of holidays being three. Religious and local holidays are also covered in a number of agreements. In one agreement 14 holidays were provided, most of them religious holidays.

Overtime and extra-pay provisions.—The time-and-a-half rate for overtime work prevails in these agreements, and a few provide for double or triple pay for some or all workers. Overtime work is paid for at regular rates in only four cases. A considerable number of agreements, however, provide rates varying from straight to triple pay for different classes of drivers.

Overtime work is prohibited entirely in very few cases and then only for certain types of work. In a number of agreements, however, overtime is restricted to emergency or necessary work. Restrictions on the amount of overtime which may be worked in a day or week are not usually provided.

The most frequent extra-pay provision is that requiring the payment of a minimum amount if a driver begins work, but is sent home before the regular day's work is completed. Generally at least half a day's pay must be given, with full pay if the driver starts the afternoon's work. In a few cases a full day's pay must be given whenever work is begun. When the cause of the temporary lay-off is adverse weather conditions, this minimum payment need not be made.

A certain payment is also specified for drivers ordered to report to work when no work is given. This is usually 2 hours' pay but in some cases half or a full day's pay. When a driver is sent out on an overnight trip, the employer is usually required to cover whatever expenses are incurred for meals and lodging. Some agreements specify the amount to be furnished for such expenses, varying from $1.50 to $3.50 per day. A meal allowance is sometimes granted for trips which are unusually long but which do not involve being away from home over night.

Other types of extra pay sometimes provided in these agreements are a bonus in addition to overtime when a driver is called back after having completed his day's work and a provision for regular pay when a driver is required to wait beyond the usual time to receive his wages. There are also numerous provisions covering liability for damaged or undelivered goods, for unusually heavy loads, etc.

Conditions of employment.—Union membership is usually a condition of employment. Owners who do any driving must also be members of the union. About one-fourth of the agreements include the check-off system of collecting union dues, but in some cases only when individual members authorize the deduction. In other agreements the company deducts the amount of back dues when requested by the business agent of the union.

These agreements usually designate the union as the source of supply for replacements or additions to the permanent staff. The union is granted a reasonable amount of time, sometimes specified as 24 or 48 hours, in which to furnish help. If there is a shortage, preference must usually be given to members of the employers' association which is a party to the agreement. In a few agreements union membership is not required. In such cases it may be provided that members are to be given preference or that there is to be no discrimination for union membership. These agreements do not establish the check-off or designate the union as the source of supply of additional workers.

About half of the agreements require that temporary workers shall carry a union permit or be selected with the approval of the union. In the others, the company is permitted to select freely its temporary workers. In all instances temporary workers must join the union within a given time which varies from 1 to 30 days.

One week s notice must be given in a number of agreements when a driver is quitting or is to be laid off, although in a few cases two weeks' notice is required. Failure to give the required notice when quitting causes the driver in many cases to forfeit a week's pay. Similar notice is required for discharge for causes other than intoxication or dishonesty. Other reasons for discharge are not usually specified, except that the discharge must be for good cause and must not involve union discrimination. The company generally agrees to discharge men expelled from the union, the union in turn agreeing to consider the expulsion of any driver discharged for cause.

No single method of sharing work during dull periods predominates in these agreements. Overtime may be prohibited, hours reduced, or available work equally divided among regular workers, while in some cases rotation of opportunities for work is followed. In a number of agreements seniority is to be the guide in lay-offs and reemployment, seniority rights to continue through a lay-off of not more than a specified number of weeks. Seniority rights also hold through leave of absence for sickness or union duties, provided that the leave does not exceed from 3 to 6 months.

Other provisions.—Vacations with pay are granted in nearly a fourth of these agreements, the length of vacations being about equally divided between 1 and 2 weeks. Usually a year of service is required before a driver is eligible for a vacation. The acceptance of pay in lieu of a vacation is permitted only to drivers leaving the service of the employer. The period during which vacations must be taken is frequently specified but preference is accorded to individual drivers in accordance with seniority. In a very few cases drivers have the right to take annual vacations of a designated length, but receive no pay while off duty.

Stoppages of work are prohibited during the life of the agreements, except that in some cases sympathetic strikes are not to be considered violations of the agreements. Sometimes sympathetic strikes are permissible only when other locals of the drivers' union are involved.

The learning or probation period may vary from a few days to several months, the longer periods being required on the more complicated delivery routes. Somewhat lower pay is provided during this period.

When uniforms are required the company usually assumes the full cost, with an additional allowance for maintenance. In a few cases the cost of uniforms is shared equally by the company and the worker. Less frequently, a maximum price to the employee is set in the agreement and the maximum number of uniforms he is expected to have is stipulated. The employer usually assumes the obligation of paying all traffic fines caused by the drivers' attempts to maintain fixed time schedules. Drivers required to furnish bond are reimbursed by their employers for the expenses incidental to such bonding.

Scales of Wages and Hours, by Cities

TABLE 2 shows the union rate per hour, the rate per week, and the hours per week as of May 15, 1936, for each classification of truck driving in the 57 cities covered.

Table 2.—Union Scales of Wages and Hours of Truck Drivers, May 15, 1936, by Cities

City and classification	Rates of wages		Hours per week
	Per hour	Per week	
Atlanta, Ga.			
Commercial delivery	$0.350	$16.80	48
General:			
1½ tons	.600	28.80	48
Over 1½ tons	.700	33.60	48
Boston, Mass.			
Brewery:			
Bottle and keg beer	.923	36.90	40
Helpers	.850	34.00	40
Building materials:			
Small and large trucks	.650	28.60	44
Tractors	.750	33.00	44
Helpers	.500	22.00	44
Coal	.825	33.00	[1] 40
Helpers	.725	29.00	[1] 40
Express and freight:			
1½ tons	.641	30.76	48
Over 1½ to 5 tons	.761	36.53	48
Helpers:			
Under 5 tons	.593	28.45	48
5 tons	.617	29.60	48
General:			
Under 5 tons	.625	30.00	48
5 tons and over	.708	34.00	48
Helpers	.625	30.00	48
Milk:			
1 or 2 tons	.771	37.00	48
Over 2 tons	.792	38.00	48
Wholesale route foremen	.796	43.00	54
Helpers	.646	31.00	48
Newspaper	.763	42.70	56
Piano	.667	32.00	48
Helpers	.563	27.00	48
Buffalo, N. Y.			
Bakery, retail extra drivers	.379	25.00	66
Brewery	.775	31.00	40
Helpers	.750	30.00	40
Dump trucks	.600	28.80	48
Freight	.650	31.20	48
Milk:			
Wholesale	.563	27.00	48
Special delivery	.500	22.00	48
Moving vans:			
Large	.550	29.70	54
Extra large	.575	31.05	54
Helpers	.500	27.00	54
Butte, Mont.			
Bottle beer and soft drinks	.900	36.00	40
Food:			
¾ ton and under	.396	19.00	48
Over ¾ ton	.629	30.20	48
General:			
¾ ton and under	.756	36.30	48
Over ¾ ton to 3 tons	.794	38.10	48
3 to 6 tons	.825	39.60	48
6 tons and over	.969	46.50	48
Helpers	.756	36.30	48
Laundry	.756	30.25	40
Flatwork only	.794	31.75	40
Butte, Mont.—Continued			
Meat:			
Butcher-drivers	$0.875	$42.00	48
Retail delivery (small trucks)	.688	33.00	48
Taxi, Rate A	.500	27.00	54
Taxi, Rate B	.500	31.50	63
Textile retail stores:			
¾ ton or under	.411	16.45	40
Over ¾ ton	.719	28.75	40
Chicago, Ill.			
Baggage and parcel delivery:			
1 ton or under	.647	33.00	51
1½ to 3 tons	.667	34.00	51
Armored cars	.843	43.00	51
Bakery:			
Commissary	.648	35.00	54
Special delivery	.771	37.00	48
Bone and tallow	.834	45.05	[2] 54
Route men	1.026	55.44	[2] 54
Brewery:			
Extra and transfer	.975	39.00	40
Extra drivers, keg beer	.988	39.50	40
Helpers:			
Bottle beer	.813	32.50	40
Keg beer	.888	35.50	40
Building materials:			
2 tons or under, rate A	.650	39.00	60
2 tons or under, rate B	.813	37.75	44
Over 2 tons to 4 tons, Rate A	.700	42.00	60
Over 2 tons to 4 tons, Rate B	.875	38.50	44
Over 4 tons, rate A	.750	45.00	60
Over 4 tons, rate B	.938	41.25	44
Over 5 tons—6-wheel trucks, Rate A	1.000	60.00	60
Over 5 tons—6-wheel trucks, Rate B	1.250	55.00	44
Man on trailer, rate A	.600	36.00	60
Man on trailer, rate B	.750	33.00	44
Roofing contractors	.762	48.00	60
Roofing materials:			
1 and 2 tons	.518	29.50	57
2½ and 3 tons	.570	32.50	57
3½ and 4 tons	.596	34.00	57
5 tons	.632	36.00	57
6 tons	.649	37.00	57
7 tons	.667	38.00	57
Tractors and 6-wheel trucks	.684	39.00	57
Road spreaders	.702	40.00	57
Helpers:			
Cement	.600	36.00	60
Face brick	.750	45.00	60
Butter and eggs, wholesale:			
1 ton and under	.750	36.00	48
Over 1 ton	.771	37.00	48
Coal:			
1½ tons	.820	39.36	48
2 tons	.850	40.80	48
Over 2 tons	.875	42.00	48
Helpers	.600	28.80	48

[See footnotes at end of table.

Table 2.—Union Scales of Wages and Hours of Truck Drivers, May 15, 1936, by Cities—Continued

City and classification	Rates of wages: Per hour	Rates of wages: Per week	Hours per week
Chicago, Ill.—Continued			
Commission merchants:			
1 ton	$0.802	$38.50	48
2 tons	.823	39.50	48
3 tons	.844	40.50	48
4 tons	.865	41.50	48
5 tons and over	.885	42.50	48
Helpers	.677	32.50	48
Excavating and paving:			
Under 2 tons, rate A	.875	42.00	48
Under 2 tons, rate B	.937	45.00	48
Over 2 tons—4-wheel trucks	1.000	48.00	48
6-wheel trucks	1.250	60.00	48
5- and 10-ton tractors	1.188	57.00	48
Dinky	1.125	54.00	48
Helpers	.813	39.00	48
Florists:			
Less than 1 ton	.486	27.00	55½
1 and under 2 tons	.514	28.50	55½
2 and under 3 tons	.531	29.50	55½
3 to 5 tons	.559	31.00	55½
Furniture and department stores	.750	36.00	48
Parcels	.677	32.50	48
Helpers	.638	30.60	48
Funeral	.600	36.00	60
Also wash and polish cars	.650	39.00	60
General:			
1 ton or under	.607	29.16	48
1 and under 2 tons:			
Rate A	.569	29.00	51
Rate B (1½ tons)	.634	30.42	48
2 and under 3 tons:			
Rate A	.598	30.50	51
Rate B (2 tons)	.672	32.28	48
3 and under 5 tons:			
Rate A	.618	31.50	51
Rate B (3 tons)	.692	33.21	48
5 tons and under 7 tons:			
Rate A	.667	34.00	51
Rate B (5 tons)	.721	34.61	48
7 and under 10 tons	.716	36.50	51
10 tons and over	.755	38.50	51
Grease and tallow	.767	46.00	60
Helpers	.700	42.00	60
Grocery and meat markets:			
Retail delivery	.407	22.00	54
Market pick-up	.463	25.00	54
Ice cream, special delivery	.801	36.25	45
Ice trucks	.750	45.00	60
Peddlers	.733	44.00	60
Helpers	.467	28.00	60
Livery	.467	28.00	60
Lumber, box and shavings:			
1½ and under 2½ tons	.611	33.00	54
2½ and under 4 tons	.630	34.00	54
4 tons and over	.667	36.00	54
Machinery, moving, structural steel, etc.:			
Under 1 ton	.526	30.00	57
1 and under 2 tons	.579	33.00	57
2 and under 3 tons	.596	34.00	57
3 and under 5 tons	.632	36.00	57
5 and under 7 tons	.675	38.50	57
7 and under 10 tons	.719	41.00	57
10 tons and over	.754	43.00	57
Scrap iron and metal:			
2 and under 3 tons	.688	33.00	48
3 and under 5 tons	.740	35.50	48
5 and under 7½ tons	.781	37.50	48
7½ tons and over	.865	41.50	48
Safes, 10 tons and over	.789	45.00	57
Chicago, Ill.—Continued			
Meat packing:			
Over 1 and under 3 tons	$0.771	$37.00	48
3 to 5 tons	.830	39.85	48
Over 5 tons	.850	40.80	48
Jobbers (1 to 3 tons)	.729	35.00	48
Wholesale (1 to 3 tons)	.833	40.00	48
Delicatessen and special delivery:			
1 ton or under	.712	34.17	48
City tractors	.830	39.85	48
Dump-cart tractors	.626	30.05	48
Milk:			
Special delivery	.769	41.50	54
Wholesale delivery	.843	45.50	54
Route foremen	.898	48.50	54
Assistant route foremen	.861	46.50	54
Day trucks	.775	46.50	60
Night trucks	.990	47.50	48
Moving vans:			
Furniture	.792	38.00	48
Pianos	.915	43.90	48
Helpers	.708	34.00	48
Temporary helpers	.650	31.20	48
Newspaper:			
Morning papers	1.011	45.50	45
Afternoon papers	.912	46.50	51
Piano movers	.762	41.16	54
Railway express:			
1 to 2½ tons	.699	33.57	48
3 to 5 tons	.796	38.21	48
Passenger coaches	.651	31.26	48
Helpers:			
1- and 2-ton trucks	.603	28.94	48
2½- to 5-ton trucks	.675	32.40	48
Scavenger trucks (private)	.889	48.00	54
Helpers	.722	39.00	54
Street railway wrecking trucks	.708	33.96	48
Soda, mineral water, and soft drinks: Helpers	.469	22.50	48
Cincinnati, Ohio			
Bakery—crackers only	.750	36.00	48
Brewery:			
Keg beer	.800	32.00	40
Helpers	.738	29.50	40
Bus and baggage	.602	32.50	54
Helpers	.528	28.50	54
Coal and excavation	.600	32.40	54
Department stores	.625	30.00	48
Helpers	.521	25.00	48
Express	.688	33.00	48
Funeral	.625	30.00	48
Furniture:			
1 ton and under	.594	28.50	48
Over 1 ton	.615	29.50	48
Moving	.750	36.00	48
Helpers, rate A	.542	26.00	48
Helpers, rate B	.688	33.00	48
General:			
1 ton and under	.648	34.00	52½
1½ tons	.667	35.00	52½
2 tons	.686	36.00	52½
3 tons	.705	37.00	52½
4 tons and over	.743	39.00	52½
Ice trucks	.600	36.00	60
Helpers	.567	34.00	60
Laundry:			
Helpers	.385	20.00	52
Hotel trade trucks	.615	32.00	52
Oil trucks:			
Filling stations	.688	33.00	[3] 48
2 tons and under	.729	35.00	[3] 48
Over 2 tons	.781	37.50	[3] 48

See footnotes at end of table.

Table 2.—Union Scales of Wages and Hours of Truck Drivers, May 15, 1936, by Cities—Continued

City and classification	Rates of wages: Per hour	Rates of wages: Per week	Hours per week
Cincinnati, Ohio—Continued			
Piano movers	$0.813	$39.00	48
Helpers	.729	35.00	48
Cleveland, Ohio			
Bakery:			
Special delivery	.458	22.00	48
Heavy trucks (materials)	.583	28.00	48
Cracker routes	.750	30.00	40
Brewery helpers (keg and bottle beer)	.650	26.00	40
Building materials	.700	28.00	40
Concrete-mixer trucks	.750	30.00	40
Dairy, heavy trucks	.695	33.36	48
Excavating:			
Under 2 tons	.725	39.15	54
2 tons and over	.875	47.25	54
Special tractor type	.950	51.30	54
Express trucks	.734	35.22	48
General:			
Single unit	.750	36.00	48
Truck and 1 trailer	.830	39.84	48
Carry-all and winch trucks	.900	43.20	48
Helpers:			
Regular	.750	36.00	48
Jumpers	.425	20.40	48
Carry-all trucks	.900	43.20	48
Meat trucks	.750	36.00	48
Moving vans	.800	38.40	48
Helpers	.750	36.00	48
Long distance	.625	30.00	48
Helpers	.575	27.60	48
Soft-drinks: Truck helpers	.444	24.00	54
Columbus, Ohio			
Brewery and soft drinks:			
Beer	.800	32.00	40
Helpers	.625	26.00	40
Soft drinks	.500	24.00	48
Excavating, moving heavy machinery, etc.:			
1½ tons and under	.650	31.20	48
Over 2 tons	.800	38.40	48
General:			
Material	.650	31.20	48
Highway	.550	26.40	48
Davenport, Iowa			
(See Rock Island, Ill., district.)			
Dayton, Ohio			
Beer and soft drinks	.800	32.00	40
Helpers	.750	30.00	40
General:			
Under 1½ tons	.500	22.00	44
1½ and under 2 tons	.600	26.40	44
2 tons and over	.800	32.00	40
Denver, Colo.			
Baggage:			
Night	.372	19.00	51
Day	.417	21.25	51
Helpers	.349	17.80	51
Brewery	.713	28.50	40
Helpers	.675	27.00	40
Furniture delivery	.490	23.50	48
Helpers	.375	18.00	48
Furniture moving, drivers and helpers	.500	24.00	48
General:			
2 or 3 tons	.531	25.50	48
3½ tons	.563	27.00	48
4 tons	.588	28.20	48
Moving vans	.600	$28.80	48
2-ton trucks	.550	26.40	48
5-ton trucks	.600	28.80	48
Helpers	.550	26.40	48
Package delivery and pick-up	.458	22.00	48
Helpers	.313	15.00	48
Hoppers	.271	13.00	48
Des Moines, Iowa			
Coal or cement	.500	24.00	48
Ice	.563	27.00	48
Detroit, Mich.			
Bakery	.509	27.50	48
Coal	.700	28.00	40
Dump trucks	.750	36.00	48
Heavy duty (special equipment)	1.110	52.80	48
Moving vans	.650	39.00	60
Helpers	.600	36.00	60
Long distance	.600	36.00	60
Helpers	.500	30.00	60
Piano trucks	.521	25.00	48
Duluth, Minn.			
Brewery and soft drinks	.730	29.20	40
Coal—Retail yards	.630	25.20	40
Erie, Pa.			
Brewery:			
Rural trucks	.650	35.10	54
Helpers, rate A	.550	29.70	54
Helpers, rate B	.600	24.00	40
Dump trucks	.650	35.10	54
Helpers	.550	26.40	48
Parcel delivery and pick-up	.650	31.20	48
Grand Rapids, Mich.			
General:			
City	.450	21.60	48
Highway	.500	24.00	48
Houston, Tex.			
Bottle beer special delivery	.625	25.00	40
Helpers	.575	23.00	40
Indianapolis, Ind.			
Bottle and keg beer:			
City	.563	27.00	48
Long distance	.625	30.00	48
Special	.500	24.00	48
Helpers	.458	22.00	48
Building and road work:			
4-wheel trucks	.650	28.60	44
6-wheel trucks	.750	33.00	44
Up to 50 horse power tractors, bulldozers, and caterpillars	.800	35.20	44
Bus drivers	.400	19.20	48
General:			
Under 2 tons	.563	27.00	48
2 to 4 tons	.625	30.00	48
4 to 6 tons	.688	33.00	48
Over 6 tons and winch trucks	.750	36.00	48
Helpers	.521	25.00	48
Grocery:			
4-wheel trucks	.600	28.80	48
4-wheel with trailer	.700	33.60	48
6-wheel trucks	.650	31.20	48
Helpers	.550	26.40	48

See footnotes at end of table.

Table 2.—Union Scales of Wages and Hours of Truck Drivers, May 15, 1936, by Cities—Continued

City and classification	Rates of wages		Hours per week
	Per hour	Per week	
Jacksonville, Fla.			
Brewery trucks	$0.675	$27.00	40
Kansas City, Mo.			
Keg beer	.656	26.25	40
Helpers	.625	25.00	40
Los Angeles, Calif.			
Brewery:			
Bottle beer	.818	36.00	44
Keg beer and shipping	.841	37.00	44
General:			
Light pick-up, under 2 tons	.600	28.80	48
Road—up to 5 tons	.650	31.20	48
Over 5 and under 10 tons	.700	33.60	48
10 tons and over	.750	36.00	48
Low bed, winch, and rigging trucks and interchangeable semis	.800	38.40	48
Louisville, Ky.			
Brewery:			
Bottle beer	.613	24.50	40
Keg beer	.725	29.00	40
Shipping trucks	.637	25.50	40
General:			
1½ tons and under	.600	24.00	40
Over 1½ and under 5 tons	.750	30.00	40
Madison, Wis.			
Brewery and soft drinks	.625	25.00	40
Memphis, Tenn.			
Keg beer	.625	25.00	40
Dump trucks 1½ tons and over	.650	31.20	48
Milwaukee, Wis.			
Brewery:			
Bottle beer	.850	34.00	40
Helpers	.675	27.00	40
Keg beer	.800	32.00	40
Helpers	.763	30.50	40
Plant-to-plant drivers	.800	32.00	40
Bus drivers	.525	21.00	40
Coal, coke, or oil	.740	29.60	40
Helpers	.590	23.60	40
Cartage	.593	28.46	48
Helpers	.530	25.44	48
Furniture	.573	27.50	48
Helpers	.500	24.00	48
Fruit and vegetables	.593	28.46	48
Helpers	.530	25.44	48
Gas and oil	.719	28.85	48
Ice cream:			
Station-to-station drivers	.667	32.00	48
Special delivery	.609	29.25	48
Paving and excavating:			
1½ to 3½ tons	.800	38.40	48
3½ tons and over	.975	46.80	48
Ready mixed concrete:			
Private work	.800	38.40	48
City, county, and State work	.975	29.25	30
Sand and gravel	.650	31.20	48
Wastepaper and junk	.563	27.00	48
Minneapolis, Minn.			
Brewery:			
Regular route and special delivery	$0.737	$29.50	40
Station, material, etc	.713	28.50	40
Helpers	.637	25.50	40
Coal	.600	28.80	48
Helpers	.500	24.00	48
General:			
Transfer and long distance	.550	26.40	48
Helpers	.450	21.60	48
Furniture helpers	.550	26.40	48
Grocery	.650	31.20	48
Ice:			
Peddlers	.656	31.50	48
Helpers	.563	27.00	48
Wholesale and car icing	.600	28.80	48
Helpers	.550	26.40	48
Milk:			
Depot	.746	35.80	48
Relief men and route foremen	.808	38.76	48
Special delivery	.680	32.65	48
Wholesale	.802	38.50	48
Newspaper	.825	24.75	30
Soft drinks	.604	29.00	48
Moline, Ill.			
(See Rock Island, Ill., district.)			
Nashville, Tenn.			
Keg and bottle beer	.750	30.00	40
Newark, N. J.			
Brewery:			
Bottle and keg beer	1.000	40.00	40
Permit men	.950	38.00	40
Express	.713	34.22	48
Helpers	.617	29.62	48
General:			
Rate A: All sizes	.792	38.00	48
Rate B:			
1 and 1½ tons	.769	36.90	48
2 and 3 tons	.788	37.80	48
3½ and 5 tons	.844	40.50	48
Trailer and tractor	.956	45.90	48
Helpers	.625	30.00	48
New Haven, Conn.			
Brewery	.900	36.00	40
Extra drivers and helpers	.825	33.00	40
New Orleans, La.			
Brewery:			
Keg beer	.625	25.00	40
Utility	.469	18.75	40
Cotton and tobacco	.350	18.90	54
Funeral	.333	21.00	63
New York, N. Y.			
Bakery:			
Retail, rate A	.667	32.00	48
Retail, rate B	.708	34.00	48
Cake, relief drivers	.833	40.00	48
Supplies:			
1½ tons and under	.842	40.00	47½
2 to 3½ tons	.905	43.00	47½
5 tons	.968	46.00	47½
Helpers	.716	34.00	47½

See footnotes at end of table.

Table 2.—Union Scales of Wages and Hours of Truck Drivers, May 15, 1936, by Cities—Continued

City and classification	Rates of wages		Hours per week
	Per hour	Per week	
New York, N. Y.—Contd.			
Brewery:			
Bottle beer	$1.050	$42.00	40
Helpers	.925	37.00	40
Keg beer	1.075	43.00	40
Helpers	1.000	40.00	40
Building materials:			
1 ton	.854	41.00	48
2 tons	.875	42.00	48
3 tons	.896	43.00	48
4 tons	.917	44.00	48
5 tons	.938	45.00	48
7½ tons	.990	47.50	48
Cloaks and dresses:			
Rate A	.781	37.50	48
Rate B	.789	37.50	47½
Helpers:			
Rate A	.531	25.50	48
Rate B	.537	25.50	47½
Second helpers, city packages	.427	20.50	48
Cloth sponging	1.125	45.00	40
Helpers	.500	20.00	40
Coal:			
4 tons and over, gas trucks	.875	42.00	[5] 48
4 tons and over, electric trucks	.822	39.44	[5] 48
Water yards, Brooklyn and Queens:			
Under 4 tons	.896	40.32	[6] 45
4 tons and over	.933	42.00	[6] 45
Railroad yards, Queens:			
Under 4 tons	.811	36.50	[6] 45
4 tons and over	.844	38.00	[6] 45
Commissary	.631	34.10	54
Commission merchants:			
3 tons and under	1.000	48.00	48
4 tons	1.042	50.00	48
5 tons	1.062	51.00	48
7½ tons	1.115	53.50	48
Purveyors	.648	35.00	54
Helpers	.407	22.00	54
Dump trucks: 5 tons—second-hand bricks	.875	35.00	40
Express:			
Local	.781	37.50	48
Railway express, money delivery	.871	41.83	48
Railway express, money vehicle driver	.679	32.60	48
Railway express, gas and electric trucks	.824	39.53	48
Helpers	.655	31.45	48
Flour:			
4-wheel trucks	1.104	53.00	47½
6-wheel trucks	1.208	58.00	47½
Helpers	.979	47.00	47½
Funeral cars	.625	30.00	48
Furniture	.990	47.50	48
Helpers	.885	42.50	48
Moving trucks:			
1½ tons or over, gasoline	.800	38.40	48
Electric trucks	.730	35.00	48
Helpers	.670	32.15	48
General:			
1 ton	.854	41.00	48
1½ tons	.865	41.50	48
2 tons	.875	42.00	48
2½ tons	.885	42.50	48
3 tons	.896	43.00	48
4 tons	.917	44.00	48
5 tons:			
Rate A	.938	45.00	48
Rate B	.958	46.00	48
New York, N. Y.—Contd.			
General:—Continued			
7½ tons	$0.990	$47.50	48
Helpers:			
Merchandise	.750	36.00	48
Machinery	.833	40.00	48
Grocery	.896	43.00	48
Helpers	.833	40.00	48
Hotel supplies	.729	35.00	48
Helpers	.510	24.50	48
Milk:			
Retail:			
Over 3½ tons	.917	44.00	48
Route riders	1.020	49.00	48
Route foremen	1.104	53.00	48
Special delivery, 1 ton	.781	37.50	48
Wholesale, route foremen	1.104	53.00	48
Paper and twine:			
1 ton	.778	35.00	45
1½ to 4½ tons	.844	38.00	45
5 to 7½ tons	.911	41.00	45
Helpers:			
Light	.489	22.00	45
Heavy	.611	27.50	45
Piano	.938	45.00	48
Poultry drivers and helpers	.979	47.00	48
Radios and victrolas	.750	36.00	48
Norfolk, Va.			
Brewery:			
Long distance	.550	22.00	40
Helpers	.475	19.00	40
Oklahoma City, Okla.			
Brewery:			
Long haul	.625	30.00	48
Rural	.479	23.00	48
All other	.469	22.50	48
Helpers	.417	20.00	48
Peoria, Ill.			
Brewery—materials	.675	27.00	40
Beer delivery	.573	27.50	48
Building materials	.521	25.00	48
New building construction	.750	30.00	40
Cartage:			
Freight:			
Local	.573	27.50	48
Long distance	.729	35.00	48
Furniture moving	.542	26.00	48
Ice:			
Routemen	.550	26.40	48
Supply trucks	.450	21.60	48
Helpers	.400	19.20	48
Machinery, pipe, and hardware	.550	26.40	48
Road work:			
Trucks	.750	36.00	48
Tractors	1.000	48.00	48
Philadelphia, Pa.			
Brewery	.963	38.50	40
Bakery:			
Retail or wholesale delivery	.636	28.00	44
Light supply trucks	.625	27.50	44
5-ton truck	.682	30.00	44
Truck and trailer	.739	32.50	44
Building materials	.600	30.00	50
Express (railway)	.747	35.85	48
Helpers	.614	29.45	48

See footnotes at end of table.

Table 2.—Union Scales of Wages and Hours of Truck Drivers, May 15, 1936, by Cities—Continued

City and classification	Rates of wages		Hours per week
	Per hour	Per week	
Philadelphia, Pa.—Continued			
General:			
Rate A	$0.656	$31.50	48
Rate B	.677	32.50	48
Slow drivers (heavy); over the road with or without trailer; or high-speed drivers	.990	47.50	48
Helpers	.479	23.00	48
Pittsburgh, Pa.			
Bakery (not sales)	.700	33.60	48
Brewery	.971	38.84	40
Helpers	.901	36.04	40
Building construction:			
1½ tons	.650	31.20	48
Over 1½ tons	.700	33.60	48
Helpers	.550	26.40	48
General transfer	.675	32.40	48
With trailer	.700	33.60	48
Helpers	.575	27.60	48
Meat	.650	31.20	48
Movers, furniture	.650	31.20	48
Helpers	.550	26.40	48
Newspaper	.850	47.60	56
Helpers	.675	37.80	56
Portland, Oreg.			
Dairy and ice cream	.647	31.15	48
Relief men	.695	33.46	48
General:			
1 ton or under	.656	31.50	48
1½ to 2½ tons	.688	33.00	48
3 tons and over	.719	34.50	48
Tractors, 6-wheelers and semitrailers	.781	37.50	48
Long distance:			
Solo drivers	.750	36.00	48
Truck and trailer or semitrailer	.969	46.50	48
Pick-up and delivery men	.688	33.00	48
Helpers	.656	31.50	48
Providence, R. I.			
Brewery	.850	34.00	40
General (in city):			
Under 5 tons	.550	26.40	48
5 tons and over	.600	28.80	48
Helpers	.500	24.00	48
Reading, Pa.			
Brewery	.875	35.00	40
General:			
Under 3 tons	.500	24.00	48
3 and under 5 tons	.563	27.00	48
5 tons and over	.729	35.00	48
Rochester, N. Y.			
Brewery:			
Keg and bottle beer	.750	30.00	40
Helpers	.675	27.00	40
Coal and coke	.550	26.40	48
Helpers	.500	24.00	48
Freight, 1 to 1½ tons	.525	25.20	48
Furniture and freight, over 1½ tons	.575	27.60	48
Ice	.708	34.00	48
Milk, route foremen	$0.941	$45.15	48
Newspaper and parcel delivery	.542	26.00	48
Packers (meat), city	.547	26.25	48
Piano	.700	33.60	48
Riggers and machinery haulers	.700	33.60	48
Helpers (not otherwise specified)	.525	25.20	48
Rock Island (Ill.) district			
Brewery drivers and helpers	.750	30.00	40
Keg and bottle beer delivery	.550	33.00	60
Dump trucks:			
1½ tons	.500	15.00	30
Over 1½ tons	.600	18.00	30
General	.520	31.20	60
Helpers	.470	28.20	60
Tractors:			
20-horsepower	.500	15.00	30
30-horsepower	.600	18.00	30
60-horsepower	.700	21.00	30
St. Louis, Mo.			
Bread and cake special delivery	.688	33.00	48
Cracker delivery (sales)	.656	31.50	48
Brewery	.800	32.00	40
Helpers	.600	24.00	40
Coal:			
Under 5 tons	.638	25.50	[1] 40
5 tons and over	.713	28.50	[1] 40
Commission merchants	.521	25.00	48
Department stores:			
Under 1 ton	[7] .646	31.00	48
1 ton and over	[7] .667	32.00	48
Large trucks	[7] .688	33.00	48
Excavating	.650	31.20	48
Express, railway	.685	32.88	48
Helpers	.505	24.24	48
Funeral	.648	35.00	54
Furniture:			
Retail delivery	.729	35.00	48
Furniture and piano moving	.750	40.50	54
Wholesale mattress trucks	.563	27.00	48
Helpers on delivery	.656	31.50	48
Helpers on moving	.700	37.80	54
General—transfer:			
2 tons	.542	26.00	48
2 to 5 tons	.667	32.00	48
5 to 7½ tons	.725	34.80	48
7½ tons and over	.771	37.00	48
Helpers	.417	20.00	48
Grocery, chain stores	.750	36.00	48
Ice	.625	30.00	48
Milk:			
Store routes	.452	37.95	84
Route riders and relief men	.889	42.69	48
Special delivery	.522	31.31	60
Wholesale delivery	.690	45.54	66
Newspaper—day	.593	32.00	54
Newspaper—night	.667	36.00	54
Oil	.830	33.20	40
Packing houses:			
½ to 5 tons	.693	33.25	48
Hog trucks	.698	33.50	48
Taxi	.422	22.80	54

See footnotes at end of table

Table 2.—Union Scales of Wages and Hours of Truck Drivers, May 15, 1936, by Cities—Continued

City and classification	Rates of wages		Hours per week
	Per hour	Per week	
St. Paul, Minn.			
Brewery:			
Regular routes and special delivery	$0.737	$29.50	40
Station, material, etc.	.713	28.50	40
Helpers	.637	25.50	40
Coal	.600	28.80	48
Helpers	.500	24.00	48
Dump trucks	.550	26.40	48
Fruit, oil and gas, package delivery, wholesale grocery, ice cream, packing plants, long distance trucks, and general hauling	.500	24.00	48
Grocery—retail delivery	.370	20.00	54
Ice	.583	31.50	54
Milk:			
Special delivery	.604	29.00	48
Relief men	.779	37.39	48
Soft drinks	.604	29.00	48
Salt Lake City, Utah			
Brewery	.725	29.00	40
Coal	.550	22.00	40
Construction work:			
7 tons and under	.750	36.00	48
Over 7 tons	.900	43.20	48
Semi trailer or over 10 tons	1.000	48.00	48
San Antonio, Tex.			
Brewery	.729	29.15	40
General	.500	24.00	48
Helpers	.281	13.50	48
Taxi	.469	22.50	48
San Francisco, Calif.			
Baggage	.750	36.00	48
Brewery:			
Bottle beer delivery	.854	41.00	48
Helpers	.813	39.00	48
Keg beer and shipping	.932	41.00	44
Helpers	.886	39.00	44
Building material—5 tons	.875	35.00	40
Concrete mixer trucks:			
2 yards or less	.813	33.00	40
3 yards	.875	35.00	40
4 yards	.938	37.50	40
Excavating and dump trucks:			
2 yards or less	.857	30.00	40
3 yards	.929	33.00	40
5 yards	1.000	35.00	35
6 yards	1.071	37.50	35
Tractors 50 horsepower or less	1.250	37.50	30
Fruit	.889	42.00	47¼
Small stores	.300	18.00	60
Going to market trucks	.417	25.00	60
Not going to market	.350	21.00	60
Furniture:			
Drivers and helpers	.750	36.00	48
Delivery from store to purchaser responsible for routing and safe delivery	.813	39.00	48
Responsible only for care of truck	.750	36.00	48
Moving vans and trucks	.813	39.00	48
Motorcycle delivery	.688	33.00	48
Helpers:			
Not responsible for load	.688	33.00	48
Responsible for routing and load	.750	36.00	48
Moving trucks and vans	.688	33.00	48
San Francisco, Calif.—Contd.			
General:			
Up to 1¼ tons	$0.698	$33.00	47¼
1¼ to 2¼ tons	.762	36.00	47¼
2¼ to 3¼ tons	.825	39.00	47¼
3¼ to 7¾ tons	.889	42.00	47¼
7¾ to 10¼ tons	.952	45.00	47¼
10¼ tons and over	1.016	48.00	47¼
Helpers	.677	33.00	48¾
Highway trucks	.750	45.00	60
Helpers	.700	42.00	60
Motorcycles:			
Less than ½-ton capacity	.635	30.00	47¼
½-ton capacity and over	.698	33.00	47¼
Grocery	.677	32.50	48
Ice:			
Retail delivery	.865	41.54	48
Wholesale delivery	.914	43.85	48
Helpers	.865	41.54	48
Ice cream:			
1 ton special delivery	.750	36.00	48
2 tons—routes	.813	39.00	48
Livery:			
Limousine drivers	.625	25.00	40
Sedan drivers	.500	20.00	40
Sightseeing-car drivers	.639	34.50	54
Laundry—hotel and restaurant trade	.667	32.00	48
Meat markets:			
Retail	.521	25.00	48
Jobbing	.708	34.00	48
Meat cutters and drivers	.646	31.00	48
Provision drivers	.697	33.45	48
Wholesale:			
Jobbing:			
Light trucks	.573	27.50	48
Large trucks	.688	33.00	48
Butcher-drivers	.841	40.40	48
Relief drivers	.875	42.00	48
Milk delivery:			
Regular routes	.871	39.23	45
Relief men	.936	42.12	45
Mineral water	.688	33.00	48
Parcel delivery	.750	36.00	48
Piano trucks	.875	42.00	48
Poultry—wholesale:			
Under 2 tons	.771	37.00	48
2 tons and over	.875	42.00	48
Soft-drinks delivery	.750	36.00	48
Special delivery	.625	30.00	48
Seattle, Wash.			
Baggage	.719	34.50	48
Bakery	.938	45.00	48
Special delivery	.833	40.00	48
Brewery	.900	36.00	48
Dump	.813	39.00	48
Furniture	.719	34.50	48
General:			
Under 1,500 pounds	.656	31.50	48
¾ to 1 ton	.688	33.00	48
1 to 2½ tons	.719	34.50	48
2½ to 4 tons	.750	36.00	48
4 to 5 tons	.781	37.50	48
5 tons and over	.813	39.00	48
Long distance:			
Solo drivers	.750	36.00	48
Truck and trailer	.844	40.50	48
6-wheel trucks	.800	38.40	48
Pick-up and delivery	.688	33.00	48
Helpers	.656	31.50	48
Ice	.833	40.00	48
Helpers	.625	30.00	48

See footnotes at end of table.

Table 2.—Union Scales of Wages and Hours of Truck Drivers, May 15, 1936, by Cities—Continued

City and classification	Rates of wages		Hours per week
	Per hour	Per week	
Seattle, Wash.—Continued			
Ice cream	$0.813	$39.00	48
Helpers	.719	34.50	48
Milk:			
Regular routes	.844	37.14	44
Relief men	.906	39.86	44
Oil	.925	37.00	40
Produce trucks	.625	30.00	48
Scranton, Pa.			
Department stores:			
Furniture	.611	33.00	54
Helpers	.574	31.00	54
Packages	.574	31.00	54
Ice cream	.457	32.00	[8] 70
Milk:			
3 tons and over	.651	35.15	54
Delivery	.616	33.25	54
Special delivery	.528	28.50	54
Route foreman	.765	41.33	54
Tank trucks	.648	35.00	54
Helpers	.528	28.50	54
Soft drinks	.729	35.00	48
South Bend, Ind.			
Brewery	.738	29.50	40
Coal	.600	24.00	[9] 40
Helpers	.500	20.00	[10] 40
Oil	.664	26.54	40
Spokane, Wash.			
Butter—relief drivers	.500	24.00	48
Dump trucks—3 yards and over	.750	36.00	48
General:			
Up to 1½ tons	.534	25.50	48
1½ to 3 tons	.594	28.50	48
Over 3 tons	.656	31.50	48
Local drivers:			
Pick-up and delivery	.594	28.50	48
Extra drivers	.650	39.00	48
Helpers	.531	25.50	48
Long distance:			
Solo drivers—4-wheel trucks	.656	31.50	48
6-wheel trucks	.719	34.50	48
Truck and trailer	.781	37.50	48
Semitruck, 1 set of wheels on trailer	.719	34.50	48
Semitruck, dual axle trailer	.781	37.50	48
Ice cream	.688	33.00	48
Milk delivery	.594	28.50	48
Relief drivers	.625	30.00	48
Springfield, Mass.			
Coal and coke	.600	24.00	40
Helpers	.500	20.00	40
General:			
Local	.575	27.60	48
Road	.750	36.00	48
Helpers	.500	24.00	48
Toledo, Ohio			
Brewery	$0.825	$33.00	40
Carry-all and winch trucks	.700	33.60	48
General	.550	26.40	48
Helpers	.525	25.20	48
Package jumpers	.400	24.00	48
Machinery movers, boilers, tanks, etc. and heavy moving	.750	36.00	48
Helpers	.625	30.00	48
Moving vans	.575	27.60	48
Helpers	.550	26.40	48
Washington, D. C.			
Building material and supply:			
Under 1 ton	.450	21.60	48
Under 2 tons	.650	31.20	48
2 tons and over	.750	36.00	48
Truck and trailer	.850	40.80	48
Helpers	.600	28.80	48
Ice cream	.632	36.00	57
Milk:			
Special delivery	.417	25.00	60
Wholesale and retail combination	.500	30.00	60
Retail:			
50 gallons weekly	.542	32.50	60
75 gallons weekly	.583	35.00	60
Yeast	.788	31.50	48
Worcester, Mass.			
Brewery	.925	37.00	40
General—trucks with trailers or semitrailers:			
1 ton and under 3 tons	.540	25.92	48
3 and under 5 tons	.580	27.84	48
5 and under 8 tons	.630	30.24	48
8 tons and over	.670	32.16	48
Platform helpers	.542	26.00	48
Driver helpers	.500	24.00	48
Wholesale grocery:			
1 ton and under 3 tons	.500	24.00	48
3 and under 5 tons	.550	26.40	48
5 tons and over	.580	27.84	48
Helpers	.400	19.20	48
York, Pa.			
Brewery			
Bottle-beer delivery	.568	25.00	44
Bottle and keg beer	.682	30.00	44
Hauling	.625	30.00	48
Driver in charge	.688	33.00	48
General hauling (city)	.430	20.64	48
Youngstown, Ohio			
Brewery	.729	35.00	48
Helpers	.521	25.00	48
Freight drivers and helpers	.650	31.20	48
Movers	.700	33.60	48
Helpers	.600	28.80	48
Grocery—Wholesale	.604	29.00	48
Produce trucks	.550	26.40	48
Helpers	.435	20.88	48

[1] 48 hours and same pay, September to April inclusive.
[2] 1 week's vacation with pay, 1 to 7 years' service; after 7 years' service, 2 weeks.
[3] Majority of members work 40 hours per week and are paid for 48.
[4] 40 hours and same pay, October to April inclusive.
[5] 40 hours and $40 per week, June to September inclusive.
[6] 48 hours and same pay, October to March inclusive.
[7] 1 week vacation with pay after 1 year's service.
[8] 56 hours and same pay per week, October to April inclusive.
[9] 48 hours and $28.80 per week, September to April inclusive.
[10] 48 hours and $24 per week, September to April inclusive.

Table 3 shows the union rates and other pertinent data for 35,000 salesmen drivers who are paid on the commission or on salary and commission basis. These data were not included in the averages and rates shown in the preceding tables.

Table 3.—Union Wages and Hours of Salesmen Drivers, May 15, 1936, by Cities

City and classification	Rates of wages		Hours per week
	Per hour	Per week	
Atlanta, Ga.			
Taxi	------	(1)	72
Birmingham, Ala.			
Dry cleaners:			
Company	$0.250	[2] $15.00	60
Individual	------	[3] 12.50	------
Laundry:			
Company	------	(4)	60
Individual	------	[5] (5)	------
Milk	.365	[6] 17.50	48
Boston, Mass.			
Milk-route salesmen	.704	[7] 38.00	54
Buffalo, N. Y.			
Bakery:			
Retail	.364	[8] 24.00	66
Wholesale, restaurant	.409	[8] 27.00	66
Brewery: Bottle beer	.700	[9] 28.00	40
Milk: Retail-route drivers	.300	[9] 18.00	60
Chicago, Ill.			
Bakery:			
Bread	.979	[9] 47.00	48
Cake, only	.938	[9] 45.00	48
Pie	1.000	[9] 48.00	48
Beer:			
Bottle	.775	[9] 31.00	40
Keg	.888	[9] 35.50	40
Butter and eggs	.781	[10] 37.50	48
Dye house, retail	------	[9] 26.00	(12)
Ice cream	.222	[13] 12.00	[14] 54
Laundry, routemen	------	[11] 30.00	(12)
Meat packing sales drivers	.614	[9] 36.85	[15] 60
Milk:			
Retail routemen	.708	[9] 42.50	60
Wholesale	.815	[9] 44.00	54
Soft drinks and mineral water	.521	[9] 25.00	48
Tea and coffee	.698	[9] 33.50	48
Yeast	.938	[9] 45.00	48
Cincinnati, Ohio			
Bread	.729	[9] 35.00	48
Brewery: Bottle beer	.788	[9] 31.50	40
Dye house and dry cleaners:			
Private trade	.469	[16] 22.50	48
Agency	.469	[17] 22.50	48
Ice cream	.704	[9] 38.00	[19] 54
Laundry: Private trade	.577	[18] 30.00	52
Milk:			
Retail	.667	[9] 36.00	[19] 54
Wholesale	.741	[9] 40.00	[19] 54
Soft drinks and mineral water	.604	[9] 29.00	48
Tea and coffee	.463	[9] 25.00	54
Cleveland, Ohio			
Bakery:			
Retail	.417	[9] 25.00	60
Wholesale	.467	[20] 28.00	60
Hebrew bakery salesmen	------	[21] 25.00	------
Cookie salesmen	------	(22)	------

City and classification	Rates of wages		Hours per week
	Per hour	Per week	
Cleveland, Ohio—Continued			
Beer:			
Bottle	$0.775	[9] $31.00	40
Keg	.800	[9] 32.00	40
Dry cleaners, retail	.375	[23] 15.00	40
Dye house, wholesale	.625	[24] 25.00	40
Ice cream	------	27.60	[25] 60
Milk	------	[26] 14.40	[25] 60
Soft drinks	.750	[9] 30.00	40
Distributors	.648	[9] 35.00	54
Transportation over the road			
Single car	------	(27)	(28)
Trailer	------	(29)	------
Columbus, Ohio			
Taxi	------	(30)	72
Dallas, Texas			
Beer, bottle	.500	[9] 20.00	40
Denver, Colo.			
Bakery: Salesmen	.625	[32] 30.00	48
Taxi	.241	[31] 13.00	54
Des Moines, Iowa			
Bakery: Wholesale routemen	.379	[34] 25.00	66
Detroit, Mich.			
Brewery:			
Bottle	.800	[9] 32.00	40
Keg	.813	[9] 32.50	40
Helpers	.700	[9] 28.00	40
Laundry:			
Laundry	.417	[33] 25.00	60
Commercial	.417	[34] 25.00	60
Linen	.167	[35] 10.00	60
Bob-tail drivers, family	------	(36)	60
Bob-tail drivers, family and commercial	------	(37)	60
Miscellaneous:			
Drive away cars, single	------	(27)	------
Truck trailer	------	(38)	------
Duluth, Minn.			
Ice and fuel	.500	[9] 27.00	48
Laundry and dry cleaning	.417	[9] 20.00	48
Milk	.431	[9] 20.70	[25] 48
Erie, Pa.			
Brewery	.625	[9] 25.00	64
City delivery	.463	[39] 25.00	54
Freight handlers, over the road	------	(40)	[41] 60
Houston, Tex.			
Beer, bottle	.563	[9] 22.50	40
Milk	.303	[9] 20.00	66
Wholesale	.379	[9] 25.00	66

See footnotes at end of table.

Table 3.—Union Wages and Hours of Salesmen Drivers, May 15, 1936, by Cities—Continued

City and classification	Rates of wages: Per hour	Rates of wages: Per week	Hours per week
Kansas City, Mo.			
Bakery:			
Bread and cake salesmen, retail	$0.656	[42] $31.50	48
Bread, pie, and cake salesmen, wholesale	.625	[43] 30.00	48
Beer, bottle	.469	[9] 18.75	40
Soft drinks	.375	[9] 15.00	40
Louisville, Ky.			
Freight, over the road	------	([44])	------
Loading and unloading	------	([45])	------
Memphis, Tenn.			
Beer, bottle	.500	[9] 20.00	40
Dry cleaners	.375	[46] 22.50	60
Auto transports, over the road	------	([47])	([48])
Milwaukee, Wis.			
Bakery	.450	[9] 27.00	[25] 60
Box lunch	.333	[9] 16.00	[25] 48
Coffee and tea: Salesmen	.615	[9] 29.50	[25] 48
Dry cleaners	.313	[9] 15.00	[25] 48
Ice cream:			
City route	.515	[9] 26.00	[25] 50½
Country	.552	[9] 29.25	[25] 53
Route riders—relief	.579	[9] 29.25	[25] 50½
Soft drinks and soda water	.521	[9] 25.00	[25] 48
Minneapolis, Minn.			
Coffee and tea	.500	[9] 20.00	40
Ice cream	.625	[9] 30.00	48
Milk, retail	.708	[9] 34.00	48
Taxi	------	([49])	63
New Orleans, La.			
Beer, bottle	.450	[9] 18.00	40
New York, N. Y.			
Bread:			
Bronx:			
Salesmen	------	[50] 42.50	60
Riders	------	45.00	60
Brooklyn:			
Salesmen	------	[51] 40.00	60
Riders	------	[9] 45.00	60
Cake	------	[52] 37.50	48
Milk:			
Retail:			
Route salesmen	.802	[53] 38.50	48
Vacation route riders	.906	[54] 43.50	48
Wholesale:			
Route salesmen, 3½ tons	.812	[55] 39.00	48
Route riders	.896	[55] 43.00	48
Pie: Salesmen	.694	[56] 37.50	54
Taxi	------	([57])	84
Theatrical	------	([58])	([59])
Helpers	------	([60])	([59])
Norfolk, Va.			
Brewery	.450	[9] 18.00	[25] 56
Philadelphia, Pa.			
Taxi:			
Employed by one company	------	([61])	60
Independent companies	------	([62])	60

City and classification	Rates of wages: Per hour	Rates of wages: Per week	Hours per week
Pittsburgh, Pa.			
Bakery:			
Rate A	$0.409	[9] $27.00	66
Rate B	.500	[9] 27.00	54
Milk:			
Retail	.583	[9] 35.00	60
Wholesale	.583	[9] 35.00	60
Downtown delivery	1.042	[9] 50.00	48
Portland, Oreg.			
Bakery:			
City	.625	[63] 30.00	48
Country	.688	[63] 33.00	48
Dry cleaners	------	[9] 12.00	54
Laundry	------	[9] 12.00	54
Commercial route driver (hotels)	------	[9] 25.00	54
Taxi	.333	[64] 18.00	54
Providence, R. I.			
Over-the-road truck drivers	------	([65])	------
Richmond, Va.			
Brewery	.417	[9] 20.00	[25] 48
Rochester, N. Y.			
Milk:			
Retail and wholesale	.683	[66] 32.80	48
Special	.666	[66] 31.95	48
St. Louis, Mo.			
Bread and cake, sales	.587	[67] 37.00	63
Bread delivery	.823	[68] 39.50	48
Bakery, retail shops, delivery	.455	[69] 30.00	66
Pie sales	.397	[70] 25.00	63
Laundry:			
Drivers	------	[71] 22.50	------
Commission drivers	------	([72])	------
Linen and towels	.667	[73] 30.00	45
Milk, retail delivery	.560	[74] 37.00	66
Ice cream delivery	.617	[75] 37.00	60
Auto transport	------	([76])	------
St. Paul, Minn.			
Milk delivery	.683	[9] 32.78	48
San Antonio, Tex.			
Brewery delivery trucks	.625	[9] 25.00	40
San Francisco, Calif.			
Bakery drivers	1.000	[77] 48.00	48
Laundry, family service	.625	[78] 30.00	48
Taxi drivers	.389	[9] 21.00	54
Seattle, Wash.			
Laundry and dry cleaner drivers	.625	[79] 30.00	48
Dry cleaning:			
Retail	.521	[80] 25.00	48
Wholesale	.729	[81] 35.00	48
Taxi drivers	.361	[82] 19.50	54
Soft drinks, etc	.909	[9] 40.00	44
Scranton, Pa.			
Bakery drivers:			
Retail	.370	[83] 20.00	54
Wholesale	.370	[84] 20.00	54
Milk-route drivers	.616	[9] 33.25	54

See footnotes at end of table.

Table 3.—Union Wages and Hours of Salesmen Drivers, May 15, 1936, by Cities—Continued

City and classification	Rates of wages		Hours per week
	Per hour	Per week	
South Bend, Ind.			
Taxi drivers	$0.152	[55] $10.00	66
Milk drivers	.358	[9] 21.50	[35] 60
Over-the-road trucks	------	([86])	------
Spokane, Wash.			
Bread-wagon drivers	------	[87] 25.00	------
Butter-wagon drivers	.500	[88] 24.00	48
Toledo, Ohio			
Milk-truck drivers	.466	[89] 27.00	[25] 58
Washington, D. C.			
Beer delivery	.525	[9] 25.20	48
Bakery:			
Retail drivers	.792	[9] 38.00	48
Wholesale and chain stores	.792	[9] 38.00	48
Washington, D. C.—Contd.			
Milk: Wholesale drivers	$0.542	[9] $32.50	60
Worchester, Mass.			
Road drivers (all sizes)	------	([90])	[25] 48
York, Pa.			
Road drivers	------	([91])	------
Youngstown, Ohio			
Bus drivers:			
First 3 months	------	([92])	48
4 to 12 months	------	([93])	48
After 1 year	------	([94])	48
Bakery drivers	.333	[9] 20.00	60
Milk drivers	.649	[95] 31.15	48

[1] 50 percent of gross receipts.
[2] Guaranteed $15 per week and 20 percent commission.
[3] Guaranteed $12.50 per week and 40 percent commission.
[4] 16½ percent to 20 percent of receipts.
[5] 25 percent to 30 percent of receipts.
[6] Plus commission, 30 percent wholesale and 10 percent retail.
[7] Plus 4 percent on sales in excess of $1,000.
[8] Guarantee and commission.
[9] Plus commission.
[10] Minimum guarantee and commission.
[11] Guarantee on $100 business and less, commission over $100.
[12] No specified hours—1 week vacation with pay after 1 year.
[13] Plus commission. From Oct. 1 to Apr. 30 receive $19.30 per week and work 48 hours, higher commission paid during summer months.
[14] 2 weeks' vacation with pay after 1 year for which driver is paid $110.
[15] Estimated hours—1 week vacation with pay.
[16] Plus 5 percent commission over $150.
[17] Plus 2 percent commission on all work handled.
[18] Plus commission $25 rate, $30 guaranteed.
[19] 2 weeks' vacation with pay.
[20] Commission rate $12 and 7 percent on all sales.
[21] 11 percent commission.
[22] 20 percent on first $100 and 15 percent thereafter.
[23] $15 guarantee and 10 percent commission.
[24] $25 guarantee and 5 percent commission.
[25] Estimated hours.
[26] Plus 10 percent on weekly and cash, 8 percent on all other collections. $5.50 per day, October to March inclusive.
[27] 3½ cents per mile for first 100 miles, 2½ cents thereafter.
[28] No specified hours.
[29] 3 cents per tractor mile.
[30] $12 guarantee 30 percent up to $38 week; 50 percent on all over $38.
[31] Plus 35 percent commission.
[32] 10 percent on first $300, 7 percent on all gross thereafter.
[33] Plus 20 percent commission over $100.
[34] Plus 12 percent commission over $100.
[35] Plus 10 percent commission.
[36] 40 percent of collections.
[37] 35 percent of collections.
[38] 4½ cents per mile for first 100 miles and 3½ cents thereafter.
[39] Plus 2½ cents per case and 5 cents per keg.
[40] $6 per 200 miles.
[41] Nominal hours.
[42] Guaranteed $31.50 per week plus 5 percent commission from $125 to $200 and 20 percent over $200.
[43] Guaranteed $30 per week and 3 percent commission from $200 to $300 and 8 percent over $300.
[44] 2½ cents per mile.
[45] 3 cents per mile.
[46] Plus 15 percent commission on all over $150 collections.
[47] 5 cents per loaded mile.
[48] No time limit of hours worked.
[49] 40 percent of entire receipts.
[50] Guarantee on $275 to $350 and 5 percent on net collections.
[51] Guarantee on $400 and 5 percent on net collections.

Employment and Wages in Philippine Industries

ALMOST all of the laborers in the manufacturing industries of the Philippines are Filipinos. Some of the executive and technical positions, however, are held by other nationals, chiefly Americans, Spaniards, and Englishmen. Filipinos supply a considerable amount of the capital for manufacturing; among investors of other nationalities, Americans and Spaniards furnish the most substantial sums, according to a recent report (no. 118) of the United States Tariff Commission entitled "United States—Philippine Trade," from which the data in this article are taken.

Sugar Industry

IT HAS recently been estimated that 1,980,000 people in the Philippines are entirely or in part dependent on the sugar industry. Their occupational distribution, based on a classification furnished by the Philippine Sugar Association, follows:.

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[42] 10 percent commission net sales.
[43] Plus 2½ percent on all collections and sales.
[44] Plus 2½ percent on all collections.
[45] Plus 1 percent on all collections and ½ percent on all sales.
[46] Guarantee 5 percent on all sales over $250 per week.
[47] 40 percent commission on all receipts, plus tips.
[48] $10 per day.
[49] No standard week, average 1 or 2 days a week.
[50] $9 per day.
[51] Drivers who are guaranteed $2 per day get 35 percent of gross receipts for 1 year or less and increase 1 percent each year until they reach 40 percent which is the maximum. Those on straight commission get 40 percent of gross receipts.
[52] Commission on gross receipts.
[53] Plus commission of 3 percent from $200 to $300, 4 percent from $300 to $400, and 7 percent over $400.
[54] Plus 30 percent commission of all collections above $8 per day.
[55] Rates based on Providence to New York. Run requires 16 hours running time, for which $16 is paid.
[56] 2 percent on collection.
[57] 5 percent on all over $225 per week.
[58] 1½ cents on all returned cartons.
[59] 18 percent on all over $170 per week.
[70] Plus 5 percent on all sales.
[71] Plus 10 percent on all collections over $150 per week.
[72] 35 percent of entire collection—driver furnishes truck, etc.
[73] Plus 3 percent over $1,000 monthly.
[74] Plus 1 cent per point over 208 points per day (1 point=1 quart of milk).
[75] $18.50 weekly plus 3 cents per gallon with guarantee of $37.
[76] 3 cents per mile hauling 3 cars and 4 cents per mile hauling 4 cars. No pay when driving light.
[77] Plus 5 percent over sales of $300 per week.
[78] Plus 15 percent over $200 collections.
[79] 14 percent commission with guarantee of $30.
[80] 14 percent commission on business in excess of $125 per week.
[81] Plus 2½ percent on all business.
[82] 35 percent of gross receipts with minimum of $3.25 per day.
[83] Plus 10 percent on sales over $166.67 per week.
[84] Plus 18 percent on sales over $80 per week.
[85] 50 percent commission on all fares collected—drivers furnish gas.
[86] Paid for specific trip; e. g. $2 to Niles, Mich.; $10 to Cleveland, Ohio.
[87] Plus 3 percent on all sales up to $450 per week and 10 percent on sales over $450.
[88] Plus $2 per 1,000 pounds on all butter and cheese sold over 10,000 pounds.
[89] Guarantee, paid 12 percent plus $9 per week.
[90] $15 per trip—3 trips per week.
[91] Miscellaneous trip rates.
[92] 2.4 cents per mile.
[93] 2.8 cents per mile.
[94] 3.2 cents per mile.
[95] Plus commission of 9/16 cents per unit.

Classification of Persons Employed in the Philippine Sugar Industry[1]

Occupation	Number	Dependents[2]	Total
Total	330,000	1,650,000	1,980,000
Planters	15,000	75,000	90,000
Tenants	175,000	875,000	1,050,000
Employees of centrals (sugar mills)	25,000	125,000	150,000
Plantation laborers:			
Permanent	40,000	200,000	240,000
Temporary[3]	60,000	300,000	360,000
Miscellaneous employees[4]	15,000	75,000	90,000

[1] Based on estimates made by the Philippine Sugar Association in 1934.
[2] Calculated on basis of 5 dependents per person employed.
[3] Laborers temporarily employed during the planting and harvesting season.
[4] Employees of agents and transportation companies.

The planters who have contracts with the centrals receive 50 to 60 percent of the sugar extracted from their cane. The tenants, as a rule, have the same type of contract with the centrals, and in addition, they turn over 10 to 15 percent of the total crop to the landowner as rent.

The wages of employees in sugar centrals are based on the kind of work done and the number of hours worked, which range from 8 to 12 per day. As supplements to wages, the employers provide housing, water, fuel, garden space, and in many cases, light.

The wages in sugar centrals are given below:

Unskilled manual laborers	per hour	[1] $0.05
	per day	$0.40 to $0.60
Semiskilled laborers (oilers, weighers, etc.)	do	.60 to 1.25
Skilled labor (machinists, mechanics, engineers, carpenters, etc.)	do	1.25 to 3.50
Skilled assistants (office and laboratory)	per month	100.00 to 200.00

[1] Minimum.

The salaries of heads of departments and senior executives are substantially higher than those of assistants.

On plantations, unskilled workers in general receive 15 to 25 cents per day; skilled laborers (foremen, mechanics, truck drivers, etc.) are paid from 50 cents to $1 per day. Both classes of employees are ordinarily provided with housing facilities in addition to their remuneration in money. Sugar cultivation is seasonal and as a consequence numerous laborers are employed only when planting and harvesting are carried on. These seasonal workers usually receive 15 to 25 cents per day and food and lodging.

It has been estimated by the Philippine Sugar Association that the centrals and plantations each pay about $6,000,000 per annum in wages to labor.

Coconut Industry

Sugar and rice are the most important products of the Philippines as regards value. Rice ranks first also with regard to extent of area cultivated, with coconut production following next in order.

No accurate data are available as to the number of persons engaged in coconut production. In 1933 the Philippine Department of Agriculture and Commerce estimated that 800,000 family heads depended for their employment entirely or partly upon this crop. On the basis of 5 persons per family, 4,000,000 persons, or more than 30 percent of the approximately 13,000,000 people in the Islands, directly depended on this industry for their livelihood. An additional number, of course, were indirectly dependent.

Coconuts are usually grown on a share-tenantry plan. The tenant clears and plants the land, and is also allowed to raise additional crops for his own advantage. Several schemes are used in dividing the proceeds from the sale of nuts or copra. The tenant is generally required to cultivate and harvest his crop and convert the nuts into copra. Under this system the landowner is obliged to provide his tenant with a dwelling, a kiln, work implements, and seed nuts. The landowner gets two-thirds of the proceeds from the sale of the copra, and the tenant one-third. Quite often the corn raised by the tenant is also shared with the landlord on a similar basis.

In addition to the coconuts cultivated on a share-tenantry basis and on the large estates by hired laborers, a substantial quantity is grown by peasant proprietors, who finance themselves by advances secured against their land and prospective crops. Since they generally obtain their loans from the persons to whom they sell their copra, they are frequently victimized by unscrupulous creditors. The existing system of agricultural finance in the Philippines bears heavily on the peasants and constitutes a serious impediment to the development of the coconut industry and agriculture in general.

Tobacco and Its Products

TOBACCO is cultivated on approximately 75,000 small farms and on 15 large plantations on the Islands. Investments in tobacco lands and improvements total about $21,000,000. It has been estimated that 500,000 people depend upon tobacco culture. The workers are engaged either in the fields or in the warehouses where grading and bailing are done. Daily wages range from 20 cents to $1, and are based upon the kind of work done and the speed of the workers, some of the tasks being paid for at piece rates.

Of the 30 companies manufacturing tobacco products in or near Manila, 4 were responsible, in 1935, for the major part of production in the Islands. About 20,000 factory laborers are employed in this industry. Wages range from 30 cents to $1 per day, much of the labor being on a piece-rate basis. In 1935, cigar makers in the capital city were being paid $2.25 per 1,000 cigars. It is estimated that a capable worker can make 2,000 cigars in a week. As a result of a cut-down in production in 1935, the laborers in various factories were not permitted to make over 1,000 cigars a week. Cigarettes are made by machinery, which is also used for wrapping cigars in cellophane and banding them.

Embroidery Industry

In 1935 about 30 firms in the Philippines were engaged in the embroidery business, the great majority of them in both production and export. The amount invested in this industry is estimated as $4,000,000, of which about $3,000,000 has been furnished by Americans.

The business employs between 30,000 and 50,000 persons, primarily on part time, the number fluctuating with the quantity of orders to be filled and with seasonal opportunities for other employment. Despite the skillful workmanship required, wages, which are almost wholly on a piece-rate basis, are comparatively low.

Cordage Mills

Five cordage factories were in operation in the Philippines in 1935. In recent years the average number of persons employed by cordage mills in the Islands has been 1,030. The total salary and wages paid amount to about $300,000 a year. Laborers in these mills are paid from 40 cents to $2.50 per day.

Gold Mining

About 20,000 miners and laborers were employed in Philippine gold mines in 1935. According to the following figures obtained from the Gold Mining Association of the Philippines, the increase in the number of men employed in that industry since 1932 has been marked.

	Number of employees	*Pay roll*
1932	5,600	$1,227,500
1933	7,700	1,665,000
1934	15,000	3,500,000
1935	20,000	5,000,000

Some companies supplement regular wages with shelter and rice. The wage schedule compiled by the Gold Mining Association of the Philippines in 1935 is given below:

	Daily wage
Unskilled laborers	$0.40–$0.70
Miners	.70– 1.00
Carpenters	1.50– 3.50
Mechanics	1.25– 3.25
Foremen	1.00– 2.50

Careful attention has been given by many of the mining companies to sanitation, medical treatment, and hospital care. Frequently the companies also provide facilities for recreation and maintain schools for their employees' children.

Other Industries

In the Philippine timber and lumber industry, employing approximately 35,000 persons, wages varied in 1935 from 25 cents to $2.50 per day. In the hat industry piece rates prevailed.

Earnings of Workers in the Mining Industry in Germany, Third Quarter of 1936

AVERAGE gross earnings per shift ranging, in the various districts of Germany, from 5.11 to 7.37 marks[1] for coal miners and from 4.70 to 6.04 marks for metal miners are shown by official figures recently published.[2] According to these data, average earnings in the mining industry per worker for the third quarter of 1936 ranged from 360 to 568 marks. The average gross earnings per shift and for the whole quarter, per worker, are shown in table 1.

Table 1.—Average Gross Earnings of Mine Workers in Germany, Third Quarter of 1936

[Mark at par=40.3 cents; average exchange rate in September 1936=40.1 cents]

Branch of industry and locality	Number of workers employed	Average gross earnings (in marks)	
		Per shift	Third quarter of 1936
Anthracite (*Steinkohl*):			
Upper Silesia	40,635	5.85	446.00
Lower Silesia	18,872	5.81	446.00
Saxony	15,787	6.29	471.00
Lower Saxony and Löbejün	7,427	5.93	445.00
Lower Rhine-Westfalen	242,662	7.22	541.00
Aachen	24,159	6.57	500.00
Saar	43,689	7.30	541.00
Bituminous coal (*Pechkohl*): Bavaria	5,390	5.86	451.00
Lignite (*Braunkohl*):			
District of East Elba	23,373	5.88	453.00
District of West Elba, including Kassel and Essen (Land)	38,588	6.07	474.00
Lower Rhine district	13,768	7.37	568.00
Bavaria	813	5.11	390.00
Copper ore: Mansfelder	8,268	5.74	418.00
Metal ore: Western Germany (District O. B. A. Bonn)	4,804	5.86	447.00
Iron ore:			
District of Subherz	2,130	6.04	471.00
Siegerland	5,568	5.82	441.00
Districts of Lahn, Dill, and Upper Essen	3,460	4.70	360.00
Bavaria	1,587	5.65	439.00
Salt: Germany as a whole	13,188	6.80	515.00

The average earnings per shift per worker in the various districts are shown, by occupational class and branch of the mining industry, in table 2.

During the third quarter of 1936, overtime worked averaged from 1.0 to 3.8 shifts per worker. Time lost for various reasons, however, ranged from 5.1 to 11.7 shifts, so that, out of a total of 79 possible working shifts during the quarter the actual working time per worker ranged in the various districts from 70.0 to 74.9 shifts. Details for the branches of the industry and by districts are shown in table 3.

[1] Average exchange rate of mark in September 1936=40.1 cents.

[2] Germany. Reichs und Preussisches Arbeitsministerium. Reichsarbeitsblatt (Berlin), Feb. 5, 1937, pp. II 47-50.

Table 2.—Average Gross Earnings per Shift of Mine Workers in Germany, Third Quarter of 1936, by Occupational Class

[Mark at par=40.3 cents; average exchange rate in September 1936=40.1 cents]

Branch of industry and locality	Average gross earnings per shift (in marks) of—							
	Underground and surface workers				Surface workers		Males under 16 years	Women
	Miners	Haulers	Repairmen	Others	Skilled	Others		
Anthracite (*Steinkohl*):								
Upper Silesia	7.48	5.69	6.38	4.77	5.98	4.52	1.29	2.76
Lower Silesia	6.26	4.72	5.91	5.26	5.33	4.82	1.98	2.94
Saxony	6.64	5.28	6.39	6.08	6.06	5.36	2.30	3.18
Lower Saxony and Löbejün	6.60	5.57	5.64	5.34	5.27	5.14	2.02	2.72
Lower Rhine-Westfalen	8.19	7.30	7.07	6.02	7.23	5.93	1.90	3.76
Aachen	7.33	6.55	6.58	5.71	6.26	5.30	1.60	2.88
Saar	7.68	5.28	6.94	6.95	6.99	5.95	2.12	3.63
Bituminous coal (*Pechkohl*): Bavaria	6.97	5.77	5.92	4.97	5.97	4.73	1.75	3.04
Lignite (*Braunkohl*):								
District of East Elba	6.83	5.80	5.57	5.77	5.99	5.48	1.96	2.89
District of West Elba, including Kassel and Essen (Land)	7.58	5.73	5.85	5.91	6.24	5.66	1.75	3.29
District of Lower Rhine	5.95	7.09	4.23	7.32	7.68	7.12	1.57	3.81
Bavaria	5.51	5.40	4.04	5.06	5.58	5.13	1.20	3.43
Copper ore: Mansfelder	7.07	5.77	5.55	4.90	5.48	4.64	2.63	2.70
Metal ore: Western Germany (District O. B. A. Bonn)	6.77	5.29	5.96	5.80	5.69	5.16	1.89	3.17
Iron ore:								
District of Subherz	6.85	6.36	5.01	5.95	6.12	5.69	1.34	3.71
Siegerland	6.81	5.17	6.18	5.41	5.84	5.05	1.74	2.37
Districts of Lahn, Dill, and Upper Essen	5.31	4.54	4.58	4.46	5.04	4.35	1.74	2.38
Bavaria	6.19	5.46	5.71	5.47	5.66	4.90	1.01	2.58
Salt: Germany as a whole	8.28	7.53	7.66	7.00	-------	-------	1.95	3.20

Table 3.—Average Working Time per Mine Worker in Germany, Third Quarter of 1936

Branch of industry, and locality	Number of regular shifts in quarter	Average per worker							
		Number of shifts overtime	Time (shifts) lost because of—						Number of shifts actually worked
			Insufficient equipment	Technical causes	Sickness	Leave of absence	Holidays	Total	
Anthracite (*Steinkohl*):									
Upper Silesia	79	2.0	0.5	0.1	2.9	3.3	1.3	8.1	72.9
Lower Silesia	79	2.4	-------	.1	4.0	3.8	.6	8.5	72.9
Saxony	79	2.7	1.2	-------	4.8	4.9	.8	11.7	70.0
Lower Saxony and Löbejün	79	1.6	.3	.2	3.7	3.5	1.0	8.7	71.5
Lower Rhine-Westfalen	79	2.8	2.3	.1	3.6	4.1	.8	10.9	70.9
Aachen	79	2.3	.2	-------	3.8	3.5	1.2	8.7	72.6
Saar	79	2.8	4.5	.2	2.3	3.9	.6	11.5	70.3
Bituminous coal (*Pechkohl*): Bavaria	79	2.8	-------	.5	2.9	4.4	1.3	9.1	72.7
Lignite (*Braunkohl*):									
District of East Elba	79	3.3	2.4	.2	2.3	3.9	.3	9.1	73.2
District of West Elba, including Kassel and Essen (Land)	79	3.8	1.4	-------	2.7	3.9	.6	8.6	74.2
Lower Rhine district	79	2.9	2.4	-------	2.0	3.5	.4	8.3	73.5
Bavaria	79	2.0	1.6	-------	2.9	2.3	.4	7.2	74.1
Copper ore: Mansfelder	79	1.0	-------	.1	4.9	2.0	2.3	9.3	70.7
Metal ore: Western Germany (district O. B. A. Bonn)	79	2.2	.1	.1	4.0	3.1	.8	8.1	73.1
Iron ore:									
District of Subherz	79	1.9	-------	-------	2.7	3.2	.2	6.1	74.8
Siegerland	79	1.8	-------	.1	4.1	2.4	.9	7.5	73.2
Districts of Lahn, Dill, and Upper Essen	79	1.0	-------	-------	2.8	1.8	.5	5.1	74.8
Bavaria	79	2.4	-------	-------	3.4	2.8	.4	6.6	74.9
Salt: Germany as a whole	79	1.8	1.8	.4	2.3	4.5	.5	9.5	71.4

Wage Subsidies in Germany[1]

A SCARCITY of raw materials in certain German industries in 1934 necessitated curtailment of plant operations and reduction of the working hours of their employees. As a result some of the workers, notably in the textile and related industries, had work for as little as 8 hours over a 2-week period. Thus, cotton spinners whose hourly rate, according to official figures, ranged from 45 to 65 pfennigs[2] per hour were able to earn only from 3.6 to 5 marks in 2 weeks.

In order to remedy this situation an act was passed on November 30, 1934, authorizing the director of the Federal Bureau of Employment and Unemployment Insurance to grant wage subsidies. The wage subsidy was, under the act, to be calculated upon a standard of 72 hours' work each fortnight and was to be at the rate of 50 percent of the difference between the amount actually earned during that time and the amount receivable for a full 72 hours' work. To this subsidy was to be added 10 percent for each dependent.

The textile mills, oil mills, and plants making sheepskin and goatskin products were the first to be brought under the scheme.

As cigarettes became more popular, the demand for cigars in Germany declined, and in 1935 the situation in the cigar industry became serious. Working hours for each cigar-making concern were therefore shortened, which meant a further decrease in earnings. Because of this and a rise in the cost of living, it became virtually impossible for a cigar worker to support his family. The older workers, who, as a rule, had the largest families to care for, were especially hard hit. Also, as the introduction of machines into the industry was limited on the basis of a decree of July 15, 1933, emphasis was placed on high output through manual dexterity, which in turn curtailed the earnings of cigar workers, especially the older ones.

The system of wage subsidies to older workers and heads of families was, accordingly, extended to this industry.

An order regulating such subsidies was issued by the labor trustee for this industry on October 10, 1935. It set the amounts to be paid, and fixed the effective date as January 1, 1936. The amounts of wage subsidies were to be accorded without regard to the regular rate of payment of the worker or the amount that might be received from piece work. Leaf preparers, filling makers, and cover rollers were to receive these wage subsidies even if their work was done at home, and were also to receive them for such time as might be taken for the vacations provided by the wage order. The following amounts were allowed for heads of households.

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[1] Data in this article are from Reichs- und Preussisches Arbeitsministerium. Reichsarbeitsblatt (Berlin), Sept. 5, 1936 (pp. 248–251), and Dec. 15, 1936 (p. 1501); and reports from Hugh Corby Fox, American vice consul at Berlin, Dec. 5, 1934, and June 15, 1936.

[2] Average exchange rate of mark (100 pfennigs) in November 1936=40.2 cents.

	Marks per week
For 2 dependent children under 15 years	1.50
For 3 or more dependent children under 15 years	2.50

The entire amount was to be paid as subsidy when the worker had been employed 40 hours per week, two-thirds of the amount when employed 25 to 39 hours per week, and one-half when employed 12 to 24 hours per week.

In order to raise funds for subsidies, it was decided to set up a wage equalization fund, so planned as to distribute among all producers the costs of the scheme. Under article 2 of the 15th order for the carrying out of the national labor law [3] every employer having more than two workers, not members of his family or related to him, must contribute a certain percentage of his total pay roll (not to exceed 4 percent) to this fund.

In the cigar industry the rate of contribution is determined uniformly for the whole industry by the special labor trustee for the industry. The rate of assessment fixed originally was 3 percent of the wage cost, which on March 11, 1936, the labor trustee reduced to 2 percent. Because of the rapid growth of the fund the basic rates of subsidy were raised from 1.50 and 2.50 marks per week to 2.00 and 5.00 marks.

In spite of the reported improved conditions in certain industries at the beginning of 1936, it was found necessary to extend the subsidy to some of them. Thus, on May 27, 1936, the Federal Bureau for Employment and Unemployment Insurance extended the scheme to all industries engaged in producing leather or leather gloves and to those depending upon such industries for their own activity, providing that at least 10 or more persons are employed. The wage subsidies were to go into effect as of June 1, 1936.

The payment of wage subsidies was extended by the order of May 27, 1936, to 5 additional industries, and by the order of September 5, 1936, to the rubber industry, so that 10 industries are now included in the list. These industries and the dates upon which wage subsidies became effective are as follows:

Textile industry, December 1, 1934.
Oil industry (including oil mills, oil factories, oil refineries, and oil hydrogenation), January 21, 1935.
Leather industry (sheep or goat skins only), April 1, 1935.
Small textile enterprises, September 1, 1935.
Leather industry (calf skins only), November 1, 1935.
Fur-processing industry, November 1, 1935.
Shoe industry, February 23, 1936.
Entire leather industry, June 1, 1936.
Leather-glove industry, June 1, 1936.
Rubber industry, September 1, 1936.[4]

[3] Monthly Labor Review for May 1934 (pp. 1104-1116).
[4] Date of admission.

The Federal Bureau for Employment and Unemployment Insurance issued an order on September 5, 1936, consolidating previous regulations and distinguishing between "ordinary" (*allgemeine*) and "increased" (*verstärkte*) wage subsidies.

The "ordinary" subsidy may be paid in those establishments in which at least 10 workers are regularly employed, who by reason of a shortage of work lose 5 or more days of employment in 2 consecutive weeks.

The "increased" subsidy is paid in industries and establishments specified from time to time by the Federal Bureau of Employment and Unemployment Insurance. It applies to workers who by reason of lack of work in the industry are afforded employment for less than 80 hours in 2 consecutive weeks. This subsidy is payable in the proportion of 40 percent of the difference between the actual earnings of the worker and the earnings that he would have received for 80 hours' work if working time in the establishment had not been reduced. This proportion is increased by 10 percent of the difference in respect of each dependent, but not to more than the full amount of the earnings for 80 hours' work.

The ordinary subsidy is payable according to the following schedule:

Ordinary Wage Subsidy for Short-Time Employment in Germany

[Average exchange rate of mark (100 pfennigs) in November 1936=40.2 cents]

Number of days out of work in fortnight, and wage class	Wage subsidies (in marks) per fortnight for—				
	Single persons	Persons with dependents			
		1	2	3	4 or more
5 days out of work:					
Class I	0.90	1.10	1.30	1.50	1.70
Class II	1.00	1.20	1.50	1.60	1.80
Class III	1.20	1.60	1.90	2.20	2.50
Class IV–VI	1.50	2.30	3.00	3.70	4.50
Class VII and VIII	2.00	2.80	3.50	4.30	5.00
Class IX–XI	2.50	3.30	4.10	5.00	6.00
6 days out of work:					
Class I	1.80	2.20	2.60	3.00	3.40
Class II	2.00	2.40	3.00	3.20	3.60
Class III	2.40	3.20	3.80	4.40	5.00
Class IV–VI	3.00	4.60	6.00	7.40	9.00
Class VII and VIII	4.00	5.60	7.00	8.60	10.00
Class IX–XI	5.00	6.60	8.20	10.00	12.00
7 days out of work:					
Class I	2.90	3.40	3.90	4.50	5.10
Class II	3.40	4.00	4.70	5.20	5.80
Class III	3.90	5.00	5.90	7.00	7.90
Class IV–VI	5.00	6.90	9.00	11.10	13.50
Class VII and VIII	6.00	8.40	10.50	12.90	17.00
Class IX–XI	7.50	9.90	12.30	15.00	21.00
8 days out of work:					
Class I	4.00	4.60	5.20	6.00	6.80
Class II	4.80	5.60	6.40	7.20	8.00
Class III	5.40	6.80	8.00	9.60	10.80
Class IV–VI	7.00	9.20	12.00	14.80	18.00
Class VII and VIII	8.00	11.20	14.00	17.20	24.00
Class IX–XI	10.00	13.20	16.40	20.00	30.00

Ordinary Wage Subsidy for Short-Time Employment in Germany—Continued

Number of days out of work in fortnight, and wage class	Wage subsidies (in marks) per fortnight for—				
	Single persons	Persons with dependents			
		1	2	3	4 or more
9 days out of work:					
Class I	5.00	5.70	6.60	7.50	8.30
Class II	6.00	7.00	8.00	9.00	10.00
Class III	6.80	8.40	10.00	11.80	13.40
Class IV–VI	8.50	11.60	15.00	18.40	22.50
Class VII and VIII	10.00	14.10	18.50	21.60	29.00
Class IX–XI	12.50	16.60	20.70	25.00	36.00
10 days out of work:					
Class I	6.00	6.80	8.00	9.00	10.20
Class II	7.20	8.40	9.60	10.80	12.00
Class III	8.20	10.00	12.00	14.00	16.00
Class IV–VI	10.00	14.00	18.00	22.00	27.00
Class VII and VIII	12.00	17.00	23.00	26.00	34.00
Class IX–XI	15.00	20.00	25.00	30.00	37.00
11 days out of work:					
Class I	7.00	7.90	9.40	10.50	11.90
Class II	8.40	9.80	11.20	12.60	14.00
Class III	9.60	11.60	14.00	16.20	18.60
Class IV–VI	11.50	16.40	21.00	25.60	31.50
Class VII and VIII	14.60	19.90	27.00	30.40	37.00
Class IX–XI	17.00	22.00	27.00	32.00	37.00

Wages in Sericulture and Raw-Silk Production in Japan, 1935

IN JAPAN in 1935 the daily wage of males employed by the year in the raising of silkworms was 61 sen, and that of females 44 sen[1]—an advance of 4 sen for males and 3 sen for females as compared with the preceding year. The general average wage per day for workers in raw-silk production was 71 sen in 1935 and approximately the same in 1934. The following figures, taken from the Statistical Abstract of the Ministry of Agriculture and Forestry of Japan, 1935–36, show the average daily wages (in sen) in 1935:

	Males	*Females*
Sericulture:		
Annual workers	61	44
Seasonal workers	95	74
Day laborers	96	75
Raw-silk production:		
Foremen	124	--
Reelers	--	64
Rereelers	--	60
Cocoon selectors	--	57
Folders and bookers of silk	87	65
Cookers of cocoons	76	56
Other workers	69	55
General average		71

[1] Average exchange rate of sen in 1935=0.28 cent.

EMPLOYMENT OFFICES

Operations of United States Employment Service, March 1937

ATTAINMENT of the highest level of private placements in 33 months and the second highest total in the entire history of the present United States Employment Service is reported by public employment offices for the month of March. Following continued gains in recent months, the total placements with private employers made through public employment exchanges jumped to a total of 193,622 in March, 22.5 percent over the level of the previous month. This total exceeds by 92 percent the aggregate number of placements in public and governmental work of all types and assignments on relief-works projects made by employment offices during the month. Private placements included 117,695 placements of men and 75,927 placements of women.

Total placements in all types of private, governmental, and relief employment during the month numbered 294,322.

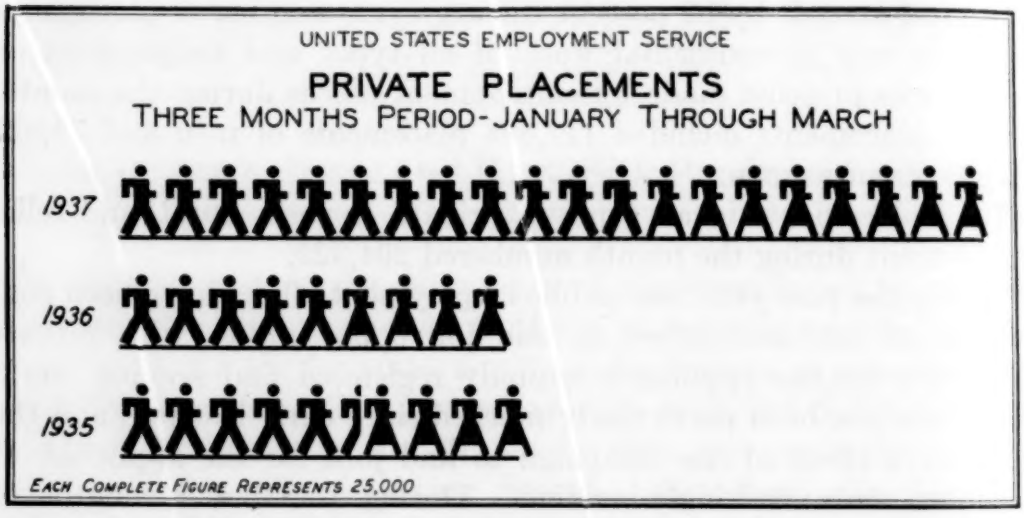
During the past year, the public employment offices have been conducting an intensive effort to find job opportunities with private employers for the applicants actually registered and seeking work. This effort has been particularly marked since early last fall, and the cumulative effect of the campaign to find jobs for the applicants is becoming more strikingly evident. During the first 3 months of the present calendar year, nearly half a million placements (495,710) of qualified applicants with private employers not connected in any way with governmental work were reported. This is more than double the total made in the same period of 1936 when 221,268 such placements were made, or in 1935 when 227,608 private placements were reported.

In the first 9 months of the present fiscal year which began July 1, 1936, 1,416,864 private placements were reported. This number materially exceeded the private-placement total for any entire preceding fiscal year in the history of the Employment Service.

In expanding the private-placement activities, the employment offices throughout the country have carried on an extensive program of field visits to discover job opportunities and to explain the service of the employment offices to prospective employers. In March, 203,645 such field visits were made. This total was the largest

reported for any single month in the history of the present Service, and included 187,056 visits seeking employment opportunities with private employers and 16,589 to governmental units and projects. Nearly 80,000 of the visits to private employers were made to sources with which the Employment Service had never before had contact.

The employment offices in March made 91,209 placements in public or governmental prevailing-wage employment not of a relief character. This total represented an increase of 11 percent over the number of such placements reported in February. While the employment in which these public placements are made is financed directly or indirectly from governmental funds (Federal, State, or local), the actual placement activity in many instances is almost identical with that of placing workers in private industry. Both the work of the office and the service to the individual placed are as great in a large proportion of cases as if the applicant had been placed with a private employer. In



a majority of instances the contractor operating on a public project or the governmental unit which hires the workers in this category is not under compulsion to use the public employment offices, but adopts this method of securing workers because of the satisfactory service rendered. Placements in public employment included 90,022 jobs filled by men, and 1,187 filled by women.

During March, 9,491 assignments on relief-works projects were made by the employment offices, including 8,310 of men and 1,181 of women. The employment offices are not relief agencies in any sense, and assignments of workers on relief projects through these offices have declined steadily since the peak of the W. P. A. assignment in December 1935.

Applications of 282,545 job seekers who registered with the Employment Service for the first time were received during March. This was an increase of 7.7 percent over the number registered in February, and was 22.5 percent less than the number applying during March 1936.

The United States Employment Service is now engaged in the preparation of a complete inventory of all registrants actively seeking work as of the first of April. This inventory, which will give detailed information concerning the characteristics of the applicants, necessitated a survey of all active registration files. As a result, final figures concerning the number of active registrants as of April 1 are not yet available but will be included in the next month's report.

Placements of war veterans with private employers showed a somewhat greater increase in March than was reported for the job seekers as a whole. The following table indicates the principal operating activities for war veterans during March:

Table 1.—Summary of Veterans' Placement Activities, March 1937

Activities	Number, March 1937	Percent of change from—		
		February 1937	March 1936	March 1935
New applications	11,517	+9.6	−6.3	−23.5
Total placements	18,861	+22.3	−40.6	−30.2
Private	9,540	+25.5	+97.8	+60.2
Public	8,686	+20.4	−40.4	−58.7
Relief	635	+3.8	−94.9	(1)

[1] Relief placements not reported for 1935.

Table 2 below indicates the principal operating totals for March and shows the portion of activities reported by each of the two operating branches of the Employment Service, the affiliated State employment services and the National Reemployment Service. Table 3 giving State-by-State statistics of activities together with the number of registrations and placements of men and women follows.

Table 2.—Operations of the United States Employment Service, March 1937

Activity	Number, March 1937	Percent of United States total	Percent of change from—		
			February 1937	March 1936	March 1935
Combined services					
New applications	282,545	100.0	+7.7	−22.5	+5.9
Total placements	294,322	100.0	+17.6	−33.5	+44.4
Private	193,622	100.0	+22.5	+107.9	+126.7
Public	91,209	100.0	+11.0	−33.2	−8.9
Relief	9,491	100.0	−5.7	−95.5	−48.2
State services					
New applications	177,145	62.7	+2.0	−10.0	+25.1
Total placements	165,750	56.3	+10.2	−27.2	+151.2
Private	119,735	61.8	+20.0	+83.2	+174.3
Public	42,025	46.1	−7.5	−13.0	+155.6
Relief	3,990	42.0	−23.7	−96.5	−32.2
National Reemployment Service					
New applications	105,400	37.3	+18.8	−37.2	−15.8
Total placements	128,572	43.7	+28.8	−40.1	−6.8
Private	73,887	38.2	+26.8	+166.1	+76.9
Public	49,184	53.9	+33.8	−44.3	−41.3
Relief	5,501	58.0	+13.9	−94.4	−55.8

Table 3.—Operations of United States Employment Service, March 1937

Total

State	Placements						New applications	
	Total	Private		Public		Relief[1]	Number	Percent of change from February
		Number	Percent of change from February	Number	Percent of change from February			
United States	294,322	193,622	+22.5	91,209	+11.0	9,491	282,545	+7.7
Alabama	5,591	3,063	+20.7	2,496	+62.9	32	3,067	−2.1
Arizona	1,744	804	−8.8	922	+32.7	18	1,664	+2.5
Arkansas	3,699	1,409	+53.7	2,082	+40.6	208	3,523	+21.5
California	22,123	15,028	+32.3	7,054	−17.0	41	28,343	+11.6
Colorado	3,225	1,861	+74.6	1,331	+76.1	33	4,243	+23.1
Connecticut	3,245	2,721	+44.7	521	−32.6	3	4,034	+22.2
Delaware	1,101	733	+11.1	366	+7.3	2	623	+23.1
Florida	8,655	5,319	+11.2	3,269	+13.6	67	4,672	+.5
Georgia	5,774	3,463	+16.1	2,286	+56.3	25	4,309	+5.3
Idaho	1,374	724	+39.2	644	+122.8	6	1,177	+31.2
Illinois	23,663	19,524	+34.1	3,480	−20.0	659	23,263	+2.3
Indiana	6,079	5,314	+23.9	759	+55.2	6	9,111	+24.3
Iowa	5,637	4,357	+20.7	1,213	−12.9	67	5,242	+22.2
Kansas	2,723	1,258	+6.7	1,449	+37.7	16	2,157	−14.8
Kentucky	5,733	4,236	−33.4	1,480	−3.1	17	4,949	+17.9
Louisiana	2,125	1,229	+16.7	890	+45.7	6	4,369	+1.5
Maine	576	236	+24.9	340	−26.9	0	639	−1.4
Maryland	2,348	1,316	+79.3	782	+7.3	250	2,782	+19.0
Massachusetts	2,933	2,209	+36.2	684	+4.1	40	5,823	+.0
Michigan	10,001	7,477	+20.9	1,133	+.4	1,391	10,126	−2.7
Minnesota	5,937	4,533	+14.2	1,339	+18.3	65	6,069	+19.0
Mississippi	4,292	182	−31.1	4,087	+64.1	23	2,954	+18.1
Missouri	6,164	3,827	+39.4	2,333	+23.6	4	7,279	+21.5
Montana	1,466	751	+4.7	712	+95.6	3	1,052	−.4
Nebraska	2,916	1,362	+46.6	1,548	+265.1	6	3,001	−.3
Nevada	1,247	359	−7.0	888	+251.0	0	963	+46.8
New Hampshire	871	536	−26.6	332	+22.5	3	835	−.1
New Jersey	5,057	4,374	+22.5	680	+46.2	3	8,192	−1.0
New Mexico	1,288	419	−23.3	863	−9.2	6	947	−12.4
New York	25,582	18,818	+50.3	6,561	+12.5	203	24,015	+2.9
North Carolina	7,963	4,416	−12.2	3,538	+51.7	9	6,170	+13.8
North Dakota	1,613	1,158	+45.7	403	−6.3	52	1,149	+49.8
Ohio	19,018	16,061	+31.1	2,548	−5.5	409	15,597	+14.0
Oklahoma	6,242	4,163	+71.6	2,059	+29.7	20	4,306	+40.7
Oregon	2,904	1,465	−22.7	1,431	−82.0	8	3,099	+11.3
Pennsylvania	16,263	8,114	+26.2	5,212	+13.0	2,937	17,560	+2.0
Rhode Island	1,256	763	+11.1	409	+249.6	84	1,709	+36.8
South Carolina	4,634	2,436	+19.5	2,140	+19.4	58	2,467	−5.2
South Dakota	1,455	756	+14.0	694	+13.6	5	1,581	−9.3
Tennessee	4,537	1,771	+20.9	2,728	+53.3	38	4,871	+11.3
Texas	28,462	17,907	+9.3	8,738	+19.4	1,817	19,452	+4.4
Utah	1,545	729	+40.7	814	+126.7	2	873	+29.0
Vermont	648	511	+89.3	132	+10.0	5	553	+20.5
Virginia	4,671	2,639	−.8	1,880	+29.2	152	4,035	+21.0
Washington	4,999	2,831	+61.9	1,936	+78.6	232	4,463	+.5
West Virginia	4,016	2,430	−11.9	1,580	+156.5	6	2,816	−1.6
Wisconsin	6,932	5,291	+27.8	1,391	−14.8	250	8,782	−5.6
Wyoming	1,588	489	+43.0	896	+173.2	203	786	+35.3
District of Columbia	2,407	2,250	+26.1	156	−6.6	1	2,853	+3.1

[1] Includes only security-wage placements on work-relief projects.

Table 3.—Operations of United States Employment Service, March 1937—Con.

Men

State	Placements						New applications	
	Total	Private		Public		Relief[1]	Number	Percent of change from February
		Number	Percent of change from February	Number	Percent of change from February			
United States	216,027	117,695	+22.3	90,022	+11.2	8,310	192,248	+8.8
Alabama	4,946	2,447	+19.4	2,469	+63.8	30	2,009	−1.6
Arizona	1,398	463	−10.3	920	+33.5	15	1,386	+6.5
Arkansas	3,148	873	+58.7	2,069	+42.9	206	2,644	+36.0
California	16,798	9,796	+47.5	6,966	−16.9	36	20,557	+10.1
Colorado	2,406	1,065	+116.0	1,320	+77.7	21	2,841	+19.3
Connecticut	1,922	1,409	+64.4	510	−33.2	3	2,433	+20.1
Delaware	757	389	+8.1	366	+7.3	2	417	+27.5
Florida	7,287	3,972	+13.2	3,258	+13.4	57	3,278	−1.7
Georgia	5,116	2,814	+23.5	2,278	+56.9	24	2,962	+9.0
Idaho	1,113	469	+52.8	640	+124.6	4	895	+41.2
Illinois	14,920	10,998	+38.3	3,405	−20.9	517	15,225	+3.0
Indiana	3,582	2,820	+16.3	756	+58.2	6	6,380	+31.4
Iowa	3,679	2,429	+7.9	1,184	−12.8	66	3,460	+21.7
Kansas	2,297	839	+3.1	1,442	+38.3	16	1,465	−14.4
Kentucky	4,458	2,986	−44.5	1,456	−2.9	16	3,330	+12.7
Louisiana	1,542	666	+14.0	871	+44.9	5	2,737	+2.1
Maine	449	111	+7.8	338	−26.5	0	431	−1.4
Maryland	1,895	897	+137.3	779	+8.0	219	1,947	+22.6
Massachusetts	1,764	1,062	+22.8	668	+4.4	34	3,814	−2.1
Michigan	7,115	4,819	+16.9	1,104	−1.0	1,192	7,420	+3.9
Minnesota	3,716	2,335	+6.7	1,320	+18.1	61	3,833	+25.0
Mississippi	4,233	135	−21.5	4,080	+64.0	18	2,607	+22.9
Missouri	4,578	2,254	+60.4	2,320	+24.5	4	4,936	+28.5
Montana	1,276	573	−2.6	700	+102.3	3	746	+4.3
Nebraska	2,287	747	+44.2	1,538	+275.1	2	1,980	+2.0
Nevada	1,176	290	−17.6	886	+253.0	0	850	+47.6
New Hampshire	652	323	−33.0	327	+24.3	2	579	+7.0
New Jersey	2,664	1,993	+20.2	669	+46.1	2	5,412	−.6
New Mexico	1,159	296	−20.9	858	−6.3	5	704	−6.0
New York	15,424	8,761	+67.0	6,470	+12.1	193	15,424	+3.1
North Carolina	5,982	2,471	+6.7	3,505	+53.4	6	4,068	+14.8
North Dakota	1,240	809	+47.6	382	−6.6	49	756	+63.6
Ohio	12,138	9,253	+27.6	2,500	−5.3	385	10,264	+10.8
Oklahoma	4,907	2,872	+77.4	2,026	+31.2	9	2,961	+53.9
Oregon	2,473	1,049	−33.6	1,418	−82.2	6	2,290	+8.3
Pennsylvania	11,910	4,543	+27.3	4,981	+13.3	2,386	11,093	+3.9
Rhode Island	781	329	+6.1	408	+248.7	44	1,048	+34.9
South Carolina	4,142	1,957	+16.1	2,133	+20.9	52	1,869	+6.7
South Dakota	1,207	530	+3.9	676	+12.1	1	1,134	−19.5
Tennessee	3,694	946	+10.5	2,721	+55.5	27	3,407	+18.8
Texas	24,562	14,098	+12.7	8,665	+19.3	1,799	14,190	+6.1
Utah	1,313	512	+50.1	799	+125.7	2	613	+36.8
Vermont	399	267	+86.7	127	+18.7	5	303	+3.8
Virginia	3,545	1,529	+7.4	1,868	+29.3	148	2,782	+25.9
Washington	4,384	2,264	+65.0	1,908	+79.0	212	3,376	−3.5
West Virginia	3,052	1,495	−22.4	1,552	+162.6	5	1,704	−12.0
Wisconsin	4,264	2,683	+27.0	1,366	−15.6	215	5,456	−6.2
Wyoming	1,306	224	+22.4	883	+183.9	199	582	+47.3
District of Columbia	971	833	+44.4	137	−11.0	1	1,650	−1.5

[1] Includes only security-wage placements on work-relief projects.

Table 3.—Operations of United States Employment Service, March 1937—Con.

Women

State	Placements						New applications	
	Total	Private		Public		Relief[1]	Number	Percent of change from February
		Number	Percent of change from February	Number	Percent of change from February			
United States	78,295	75,927	+23.0	1,187	−0.2	1,181	90,297	+5.4
Alabama	645	616	+26.5	27	+8.0	2	1,058	−2.9
Arizona	346	341	−6.8	2	−66.7	3	278	−13.7
Arkansas	551	536	+46.0	13	0	2	879	−8.1
California	5,325	5,232	+10.9	88	−22.1	5	7,786	+15.8
Colorado	819	796	+38.9	11	−15.4	12	1,402	+31.5
Connecticut	1,323	1,312	+28.1	11	+10.0	0	1,601	+25.5
Delaware	344	344	+14.7	0		0	206	+15.1
Florida	1,368	1,347	+5.6	11	+120.0	10	1,394	+6.3
Georgia	658	649	−7.9	8	−27.3	1	1,347	−2.2
Idaho	261	255	+19.7	4	0	2	282	+7.2
Illinois	8,743	8,526	+29.1	75	+70.5	142	8,038	+1.1
Indiana	2,497	2,494	+33.9	3	−72.7	0	2,731	+10.4
Iowa	1,958	1,928	−42.1	29	−14.7	1	1,782	+23.2
Kansas	426	419	+14.8	7	−22.2	0	692	−15.7
Kentucky	1,275	1,250	+27.9	24	−14.3	1	1,619	+30.4
Louisiana	583	563	+20.0	19	+90.0	1	1,632	+.6
Maine	127	125	+45.3	2	−60.0	0	208	−1.4
Maryland	453	419	+17.7	3	−62.5	31	835	+11.5
Massachusetts	1,169	1,147	+51.5	16	−5.9	6	2,009	+4.4
Michigan	2,886	2,658	+29.0	29	+107.1	199	2,706	−17.2
Minnesota	2,221	2,198	+23.3	19	+35.7	4	2,236	+9.9
Mississippi	59	47	−48.9	7	+133.3	5	347	−8.7
Missouri	1,586	1,573	+17.4	13	−43.5	0	2,343	+11.0
Montana	190	178	+38.0	12	−33.3	0	306	−10.3
Nebraska	629	615	+49.6	10	−28.6	4	1,021	−4.5
Nevada	71	69	+102.9	2	0	0	113	+41.3
New Hampshire	219	213	−14.1	5	−37.5	1	256	−13.2
New Jersey	2,393	2,381	+24.5	11	+57.1	1	2,780	−1.9
New Mexico	129	123	−28.5	5	−85.3	1	243	−26.8
New York	10,158	10,057	+38.3	91	+56.9	10	8,591	+2.5
North Carolina	1,981	1,945	−28.3	33	−31.3	3	2,102	+11.9
North Dakota	373	349	+41.3	21	0	3	393	+28.9
Ohio	6,880	6,808	+36.3	48	−12.7	24	5,333	+20.7
Oklahoma	1,335	1,291	+60.0	33	−25.0	11	1,345	+18.3
Oregon	431	416	+31.6	13	+62.5	2	809	+20.7
Pennsylvania	4,353	3,571	+25.0	231	+6.5	551	6,467	−1.0
Rhode Island	475	434	+15.1	1		40	661	+40.0
South Carolina	492	479	+36.1	7	−75.0	6	598	−29.6
South Dakota	248	226	+47.7	18	+125.0	4	447	+33.0
Tennessee	843	825	+35.5	7	−76.7	11	1,464	−2.9
Texas	3,900	3,809	−1.5	73	+32.7	18	5,262	+.3
Utah	232	217	+22.6	15	+200.0	0	260	+13.5
Vermont	249	244	+92.1	5	−61.5	0	250	+49.7
Virginia	1,126	1,110	−10.2	12	+20.0	4	1,253	+11.4
Washington	615	567	+50.4	28	+55.6	20	1,087	+15.3
West Virginia	964	935	+12.2	28	+12.0	1	1,112	+20.1
Wisconsin	2,668	2,608	+28.7	25	+92.3	35	3,326	−4.6
Wyoming	282	265	+66.7	13	−23.5	4	204	+9.7
District of Columbia	1,436	1,417	+17.4	19	+46.2	0	1,203	+10.3

[1] Includes only security-wage placements on work-relief projects.

Table 4.—Operations of United States Employment Service, March 1937

Veterans

State	Placements						New applications	
	Total	Private		Public		Relief[1]	Number	Percent of change from February
		Number	Percent of change from February	Number	Percent of change from February			
United States	18,861	9,540	+25.5	8,686	+20.4	635	11,517	+9.6
Alabama	437	240	+69.0	193	+78.7	4	138	+31.4
Arizona	135	38	−20.8	97	+54.0	0	134	+39.6
Arkansas	230	64	+30.6	153	+22.4	13	157	+18.0
California	2,108	1,123	+54.7	983	−9.1	2	1,787	+9.6
Colorado	287	108	+92.9	178	+102.3	1	187	+40.0
Connecticut	213	159	+152.4	51	−58.2	3	150	+13.6
Delaware	64	39	+5.4	24	+4.3	1	17	+41.7
Florida	575	275	+51.9	297	+32.6	3	235	+1.7
Georgia	299	175	+26.8	122	+90.6	2	116	+19.6
Idaho	148	63	+90.9	83	+107.5	2	55	−1.8
Illinois	1,337	876	+34.6	419	+9.4	42	887	+11.3
Indiana	327	257	+42.0	69	+21.1	1	399	+40.0
Iowa	584	401	+27.3	162	−21.7	21	235	−2.1
Kansas	285	129	+31.6	155	+63.2	1	107	−15.7
Kentucky	482	286	−41.5	194	+10.9	2	182	+15.2
Louisiana	164	89	+64.8	75	+4.2	0	156	−14.3
Maine	46	9	+12.5	37	−26.0	0	26	−25.7
Maryland	176	95	+156.8	64	+1.6	17	122	+35.6
Massachusetts	180	100	+40.8	76	−5.0	4	288	−13.8
Michigan	578	392	+16.0	116	+30.3	70	556	+10.5
Minnesota	336	154	−10.5	173	+38.4	9	215	+20.1
Mississippi	143	10	+25.0	132	+61.0	1	77	+20.3
Missouri	430	175	+53.5	255	+15.9	0	336	+12.4
Montana	144	39	−27.8	105	+72.1	0	54	0
Nebraska	206	67	+45.7	139	+231.0	0	123	+19.4
Nevada	146	39	+14.7	107	+181.6	0	54	+58.8
New Hampshire	60	29	−32.6	31	+6.9	0	51	+37.8
New Jersey	196	152	+35.7	44	−6.4	0	260	−10.3
New Mexico	108	32	−23.8	76	−24.0	0	32	−39.6
New York	1,022	533	+60.5	474	+12.1	15	433	−7.3
North Carolina	429	196	+4.3	232	+48.7	1	201	+28.0
North Dakota	82	40	+33.3	39	+21.9	3	41	+32.3
Ohio	1,150	825	+13.8	305	+13.4	20	584	+20.9
Oklahoma	472	254	+39.6	217	+37.3	1	162	+25.6
Oregon	295	99	−50.5	194	+59.0	2	246	+20.6
Pennsylvania	964	317	+26.8	457	+4.6	190	661	+18.5
Rhode Island	87	35	+84.2	52	+766.7	0	46	−9.8
South Carolina	218	96	−19.3	117	+42.7	5	72	−2.7
South Dakota	95	37	−26.0	58	+1.8	0	47	−46.0
Tennessee	276	71	+91.9	202	+27.8	3	205	−1.9
Texas	1,496	578	+33.8	793	+10.4	125	654	+16.2
Utah	142	62	+40.9	80	+66.7	0	21	−32.3
Vermont	19	13	+62.5	6	−14.3	0	11	−38.9
Virginia	299	126	+17.8	157	+33.1	16	144	+16.1
Washington	397	195	+57.3	189	+40.0	13	200	+1.5
West Virginia	288	118	−16.9	170	+254.2	0	101	+3.1
Wisconsin	392	193	+11.6	165	−21.4	34	336	+4.0
Wyoming	141	17	+6.3	116	+163.6	8	44	+22.2
District of Columbia	173	120	+48.1	53	+71.0	0	172	−3.4

[1] Includes only security-wage placements on work-relief projects.

TREND OF EMPLOYMENT AND PAY ROLLS

Summary of Reports for March 1937

APPROXIMATELY 330,000 more employees were on the pay rolls of the manufacturing and nonmanufacturing industries surveyed by the Bureau of Labor Statistics in March than in February. Weekly wage disbursements in March were $14,700,000 greater than the previous month. With a single exception (January 1937) employment gains have been shown each month since February 1936, and with but two exceptions (July 1936 and January 1937) increases in weekly pay rolls have been reported each month since January 1936.

Comparing March 1936 with March 1937, nearly 1,670,000 workers have been added to the pay rolls of the industries covered by the Bureau's monthly surveys. Wage disbursements were $68,000,000 greater than in March of last year.

In addition to the employment gains in manufacturing and nonmanufacturing industries in March, 2,579 workers (exclusive of executives and officers) were added to the pay rolls of class I railroads during the month, according to a preliminary report by the Interstate Commerce Commission.

Increases in employment were reported in the executive, judicial, legislative, and military services of the Federal Government. Public employment reports in March showed that there was virtually no change in the number of employees working on construction projects financed by the Public Works Administration. Seasonal influences were reflected in the gain in the number of workers employed on construction projects financed by regular governmental appropriations and the Reconstruction Finance Corporation. The downward trend in employment on Federal projects under The Works Program and on projects operated by the Works Progress Administration continued. A sharp decrease occurred on the emergency conservation program. This decrease was caused by the end of an enlistment period.

Industrial and Business Employment

INCREASES in employment from February to March were reported by 78 of the 89 manufacturing industries covered and pay-roll gains were indicated by 79 industries. For all manufacturing industries combined, employment and pay rolls in March rose 2.1 percent and

5.5 percent, respectively, representing increases of 177,000 in the number of wage earners and $10,900,000 in weekly wage disbursements. These gains brought the indexes of employment and pay rolls to the highest levels reached since November 1929.

Compared with March 1936, factory employment shows an increase of 15.0 percent and pay rolls an increase of 30.3 percent. These percentage gains indicate that 1,109,000 workers have been added to factory pay rolls and weekly wage disbursements have increased $47,900,000 since March 1936.

Wage-rate increases contributed to the large pay-roll gains, 405,365 factory workers having received increases between February 15 and March 15, according to returns from cooperating establishments employing 4,899,958 workers. As the survey covers only approximately 55 percent of all factory workers and as some firms in the reporting sample may have failed to report wage-rate changes, the foregoing figure does not represent all raises that have occurred during the month interval.

A seasonal expansion in factory employment and pay rolls is expected in March, as employment gains for this month have been recorded in 15 of the preceding 18 years for which data are available and pay rolls have risen in 14 years. With but few exceptions, however, the current gains were more pronounced than the March gains reported in preceding years.

Among the manufacturing industries which reported large seasonal employment gains were fertilizers (41.4 percent), agricultural implements (10.6 percent), sawmills (9.9 percent), cement (9.1 percent), millinery (8.6 percent), marble-granite-slate (7.7 percent), brick-tile-terra cotta (5.9 percent), and beverages (5.7 percent). Smaller seasonal gains were reported in industries related to building construction, among them being plumbers' supplies (4.8 percent), steam and hot-water heating apparatus (3.2 percent), structural metal work (3.3 percent), millwork (2.9 percent), and glass (2.2 percent). The gain of 9.4 percent in the rubber boot and shoe industry was due primarily to a resumption of operations following the settlement of strikes. Large increases reflecting further industrial improvement were reported in railroad car building (11.7 percent), shipbuilding (8.3 percent), locomotives (7.6 percent), lighting equipment (7.3 percent), and wirework (5.9 percent).

Other industries of major importance reporting employment gains were automobiles (3.3 percent), machine tools (3.2 percent), blast furnaces, steel works, and rolling mills (3.1 percent), women's clothing (2.6 percent), foundries and machine shops (2.3 percent), electrical machinery, apparatus, and supplies (1.7 percent), and men's clothing (1.6 percent).

Among the 11 industries reporting declines in employment were cotton seed—oil, cake, and meal (16.2 percent) and radios and phonographs (4.5 percent). Both of these recessions were seasonal. In addition, there was a decline of 13.1 percent in the rubber-tire industry, chiefly because of strikes.

The 16 nonmanufacturing industries surveyed showed a net gain between February and March of 154,000 workers and an increase of $3,800,000 in weekly pay rolls. Wage-rate increases affecting 53,480 employees were reported by cooperating nonmanufacturing firms. Of this number, 15,160 were in metal mines and 23,842 were in the telephone and telegraph and electric light and power industries.

As in manufacturing, employment and pay-roll gains were widespread, only one of the industries (anthracite mining) having reported an employment decline and only 2 industries (anthracite mining and insurance) having reported decreases in pay rolls. Spring purchasing combined with Easter trade accounted largely for the gain of 130,000 or 3.9 percent in retail-trade employment. The general merchandising group (department stores, variety and general merchandising stores, and mail-order houses) showed a seasonal gain of 6.8 percent, or 52,000 workers. A sharp seasonal gain was also shown in retail-apparel stores (13.3 percent) and gains ranging from 1.2 percent to 2.0 percent were shown in retail drugs, hardware, automobiles, and lumber and building materials. Dyeing and cleaning plants reported a sharp seasonal expansion in employment (6.4 percent) and quarries and nonmetallic mines also showed a seasonal gain (5.2 percent). The employment gain of 5.0 percent in metal mining raised the March index for this industry to 73.1, the highest level since October 1930, and indicates an increase of 155.6 percent from the low point recorded in August 1932. The private building-construction industry showed a seasonal expansion of 2.3 percent in employment and bituminous-coal mines reported a gain of 1.3 percent, the index for the latter industry exceeding the level of any month since April 1931. Employment in wholesale trade showed a gain of less than 0.1 percent, the losses in several seasonal lines of wholesale activity, having offset the gains reported in dry goods and apparel, food products, groceries, hardware, chemicals and drugs, and a number of other important branches of wholesale trade. Among the larger gains in various lines of wholesale trade was an increase of 4.6 percent in the iron and steel scrap business, which reflects activity resulting from the increased price for this type of material.

According to a preliminary report by the Interstate Commerce Commission, class I railroads employed 1,089,446 workers (exclusive of executives and officials) in March as compared with 1,086,867 in February, a gain of 0.2 percent. Corresponding pay-roll information for March was not available at the time this report was prepared.

Wage disbursements for February, however, amounted to $147,207,372, a decrease of 4.1 percent in comparison with January when the payments aggregated $153,438,897.

Hours and earnings.—Average hours worked per week by factory wage earners showed an increase of 1.3 percent between February and March and average hourly earnings increased 2.1 percent. The March averages, based on man-hour data supplied by cooperating establishments were 41.0 hours and 61.3 cents, respectively. Average weekly earnings in March for both full- and part-time factory wage earners ($25.54) were 3.3 percent higher than in the preceding month.

Of the 14 nonmanufacturing industries for which man-hour data are available, 12 showed gains in average hours worked per week and 8 reported increased hourly earnings. Higher average weekly earnings were reported by 11 of the 16 industries covered.

Table 1 presents a summary of employment and pay-roll indexes and average weekly earnings in March 1937 for all manufacturing industries combined, for selected nonmanufacturing industries, and for class I railroads, with percentage changes over the month and year intervals except in the few industries for which certain items cannot be computed. The indexes of employment and pay rolls for the manufacturing industries are based on the 3-year average 1923–25 as 100, and for the nonmanufacturing industries on the 12-month average of 1929 as 100. The information for the manufacturing industries, mining, laundries, dyeing and cleaning, and building construction covers wage earners only. For crude-petroleum producing it covers wage earners and clerical field force. The figures for public utilities, trade, hotels, brokerage, and insurance cover all employees, including executives.

Table 1.—Employment, Pay Rolls, and Earnings in All Manufacturing Industries Combined and in Nonmanufacturing Industries, March 1937 (Preliminary)

Industry	Employment			Pay roll			Average weekly earnings		
	Index March 1937	Percentage change from—		Index March 1937	Percentage change from—		Average in March 1937	Percentage change from—	
		February 1937	March 1936		February 1937	March 1936		February 1937	March 1936
All manufacturing industries combined [1]	(1923–25 =100) 101.1	+2.1	+15.0	(1923–25 =100) 101.1	+5.5	+30.3	$25.54	+3.3	+13.3
Class I steam railroads [2]	61.7	+.5	+7.9	[3]	[3]	[3]	[3]	[3]	[3]
Coal mining:	(1929= 100)			(1929= 100)					
Anthracite	48.9	−7.3	−6.9	37.8	−7.9	−11.2	22.51	−.7	−4.6
Bituminous	85.9	+1.3	+6.8	88.4	+7.3	+26.0	26.22	+6.0	+17.9
Metalliferous mining	73.1	+5.0	+30.8	70.6	+11.4	+56.3	30.57	+6.0	+19.5
Quarrying and nonmetallic mining	49.1	+5.2	+16.3	41.3	+9.4	+33.7	21.11	+4.0	+15.0
Crude-petroleum producing	74.3	+1.1	+4.8	63.7	−.2	+13.8	32.15	−1.3	+8.5
Public utilities:									
Telephone and telegraph	75.4	+.8	+7.3	86.9	+5.7	+12.6	30.84	+4.8	+4.9
Electric light and power and manufactured gas	92.2	+.2	+6.2	94.5	+1.3	+10.1	33.15	+1.1	+3.7
Electric-railroad and motor-bus operation and maintenance	72.6	+.2	+2.1	69.2	+.7	+2.0	31.24	+.5	−.1
Trade:									
Wholesale	92.1	+(4)	+7.6	75.0	+1.2	+8.7	28.92	+1.2	+1.0
Retail	88.5	+3.9	+8.1	70.5	+3.9	+11.0	21.35	−(4)	+2.7
General merchandising	100.3	+6.8	+10.3	87.6	+5.6	+13.3	18.24	−1.1	+2.7
Other than general merchandising	85.4	+3.0	+7.3	67.0	+3.4	+10.4	23.87	+.4	+2.9
Hotels (year-round) [5]	86.9	+.6	+4.9	72.7	+.3	+10.2	14.43	−.3	+5.0
Laundries	88.7	+.2	+8.1	77.5	+1.5	+10.8	16.41	+1.3	+2.5
Dyeing and cleaning	81.1	+6.4	+8.5	61.7	+13.0	+9.4	18.76	+6.1	+.8
Brokerage	[3]	+.7	+6.3	[3]	+1.0	+12.3	38.89	+.3	+5.7
Insurance	[3]	+(4)	+1.4	[3]	−4.6	+5.9	39.24	−4.6	+4.4
Building construction	[3]	+2.3	+24.0	[3]	+2.4	+41.8	27.93	+.1	+14.8

[1] Revised and adjusted to Census of Manufactures totals for 1933.
[2] Preliminary; source—Interstate Commerce Commission.
[3] Not available.
[4] Less than 1/10 of 1 percent.
[5] Cash payments only; the additional value of board, room, and tips cannot be computed.

Public Employment

EMPLOYMENT on construction projects financed from Public Works Administration funds showed no significant change during March. The total number of workers employed on these projects was 174,000, a decrease of less than 1 percent compared with the 175,000 employed in February. The number of workers employed on Federal and non-Federal projects financed from funds provided by the National Industrial Recovery Act remained virtually the same. A small decrease occurred, however, in the number employed on projects financed from funds provided by the Emergency Relief Appropriation Acts of 1935 and 1936. Pay-roll disbursements for March on all projects financed by the Public Works Administration totaled $13,354,000.

A substantial increase was reported in the number of workers employed on construction projects financed from regular governmental

appropriations in March. During the month 120,000 employees were working on construction projects. This was an increase of 7,000 or 6.6 percent compared with February. The sharp decrease in employment on miscellaneous projects and small decreases in the number of workers on building construction, naval vessels, and streets and roads were offset by increases on all other types of projects. The most significant percentage increase occurred on electrification projects. Marked percentage increases in employment were also reported for public roads and river, harbor, and flood control. Forestry, reclamation, and water and sewerage projects also registered increases. Total pay-roll disbursements in March amounted to $11,848,000.

In March 8,000 wage earners were employed on projects financed by the Reconstruction Finance Corporation. This was an increase of approximately 400 or 5 percent compared with the number working in February. All of this gain was reported on water and sewerage projects and employment on other types of projects, i. e., bridges, building construction, and miscellaneous, remained virtually the same. The employment on reclamation projects dropped from 33 in February to 17 in March. Total pay-roll disbursements of $929,000 were 7 percent greater than in February.

The number of wage earners employed on projects financed by The Works Program was 2,973,000. This was a decrease of 18,000 compared with the preceding month. Of this total, 250,000 were working on Federal projects; 2,105,000 on that part of the program operated by the Works Progress Administration, and 618,000 on National Youth Administration work projects and Student-Aid. Total pay-roll disbursements amounted to $133,649,000.

In the regular agencies of the Federal Government, increases were reported for the executive, judicial, legislative, and military services. The increase in the level of employment for the executive service was less than 1 percent in March as compared with February, but was 3.1 percent higher than in March a year ago. Of the 830,000 employees in the executive service in March, 713,000 were working outside the District of Columbia and 117,000 were employed in the District. The most pronounced increases in number of workers in the executive departments of the Federal Government occurred in the Post Office Department and in the Department of Agriculture. The Home Owners' Loan Corporation and the Interior Department reported moderate decreases in the number of workers employed.

Due to the end of an enlistment period, employment in emergency conservation work declined sharply during March. Total employment on this program amounted to 307,000, a drop of 87,000 or 22.1 percent compared with February. Virtually all of this decrease was shown in enrolled personnel. The number of reserve officers and edu-

cational advisers remained the same, and more than 1,000 supervisory and technical employees were added to the pay roll. Pay-roll disbursements totaled $15,770,000, a decrease of 13.9 percent during March.

A total of 131,000 workers were employed during March on the construction and maintenance of roads financed wholly from State funds. This was a moderate decrease compared with the 132,000 workers employed in February. Of the total number employed 91 percent were engaged in maintenance work and the remaining 9 percent were working on new construction. Pay-roll disbursements for the month totaled $8,334,000.

A summary of Federal employment and pay-roll statistics for February and March is given in table 2.

Table 2.—Summary of Federal Employment and Pay Rolls, March 1937 [1] (Preliminary Figures)

Class	Employment		Percentage change	Pay roll		Percentage change
	March 1937	February 1937		March 1937	February 1937	
Federal service:						
Executive [2]	[3]829,582	826,721	+0.3	$128,244,418	[4]$126,517,322	+1.4
Judicial	1,995	1,919	+4.0	525,722	477,950	+10.0
Legislative	5,060	5,044	+.3	1,188,663	1,185,405	+.3
Military	316,160	[4]314,216	+.6	23,454,514	[4]22,866,765	+2.6
Construction projects:						
Financed by P. W. A. [5 6]	173,574	174,990	−.8	13,353,904	13,796,390	−3.2
Financed by R. F. C. [7]	7,696	7,299	+5.4	929,032	864,776	+7.4
Financed by regular governmental appropriations	120,175	112,770	+6.6	11,847,783	10,904,648	+8.6
Federal projects under The Works Program	249,690	267,525	−6.7	12,504,895	13,024,133	−4.0
Projects operated by W. P. A.	2,104,938	2,125,742	−1.0	114,688,415	115,544,451	−.7
National Youth Administration:						
Work projects	191,569	189,228	+1.2	3,224,944	3,239,694	−.5
Student Aid	426,666	408,055	+4.6	3,230,513	3,110,991	+3.8
Relief work: Emergency Conservation Work [8]	307,337	394,521	−22.1	15,770,090	18,314,594	−13.9

[1] Includes data on projects financed wholly or partially from Federal funds.
[2] Includes employees of Columbia Institution for the Deaf and Howard University.
[3] Includes 16 employees by transfer previously reported as separations, not actual additions for March.
[4] Revised.
[5] Data covering P. W. A. projects financed from E. R. A. A. 1935 and 1936 funds are included. These data are not shown under The Works Program.
[6] Includes 113,930 wage earners and $8,254,306 pay roll for March; 115,214 wage earners and $8,428,606 pay roll for February covering P. W. A. projects financed from E. R. A. A. 1935 and 1936 funds.
[7] Includes 55 employees and pay roll disbursements of $2,111 for March and 20 employees and pay roll disbursements of $1,075 for February on projects financed by R F C Mortgage Co.
[8] Includes 39,829 employees and pay roll of $5,482,134 for March and 39,252 employees and pay roll of 5,440,943 for February included in executive service.

Detailed Reports for Industrial and Business Employment, February 1937[1]

THIS article presents the detailed figures on volume of employment, as compiled by the Bureau of Labor Statistics, for the month of February 1937. The tabular data are the same as those published in the Employment and Pay Rolls pamphlet for February, except for certain minor revisions and corrections.

Monthly reports on employment and pay rolls in industrial and business industries are now available for the following groups: 89 manufacturing industries; 16 nonmanufacturing industries, including building construction; and class I steam railroads. The reports for the first two of these groups—manufacturing and nonmanufacturing—are based on sample surveys by the Bureau of Labor Statistics, and in virtually all industries the samples are large enough to be entirely representative. The figures on class I steam railroads are compiled by the Interstate Commerce Commission and are presented in the foregoing summary.

Employment, Pay Rolls, Hours, and Earnings

THE indexes of employment and pay rolls, average hours worked per week, average hourly earnings, and average weekly earnings in manufacturing and nonmanufacturing industries in February 1937 are shown in table 1. Percentage changes from January 1937 and February 1936 are also given.

[1] Beginning with this issue the detailed reports for public employment will not be published in the Monthly Labor Review; they will, however, continue to be included in the monthly pamphlet on Employment and Pay Rolls.

Table 1.—Employment, Pay Rolls, Hours, and Earnings in Manufacturing and Nonmanufacturing Industries, February 1937

Manufacturing

Table 1.—Employment, Pay Rolls, Hours, and Earnings in Manufacturing and Nonmanufacturing Industries, February 1937

Manufacturing

[Indexes are based on 3-year average 1923–25=100 and are adjusted to 1933 Census of Manufactures]

Industry	Employment			Pay rolls			Average weekly earnings [1]			Average hours worked per week [1]			Average hourly earnings [1]		
	Index February 1937	Percentage change from—		Index February 1937	Percentage change from—		February 1937	Percentage change from—		February 1937	Percentage change from—		February 1937	Percentage change from—	
		January 1937	February 1936		January 1937	February 1936		January 1937	February 1936		January 1937	February 1936		January 1937	February 1936
													Cents		
All manufacturing industries	99.0	+2.6	+13.9	95.8	+5.6	+30.0	$24.73	+3.0	+14.2	40.4	+2.1	+8.1	60.2	+0.9	+5.2
Durable goods	93.2	+3.1	+18.6	92.5	+6.8	+38.9	27.54	+3.5	+17.1	41.6	+2.6	+9.8	65.1	+1.2	+5.8
Nondurable goods	105.2	+2.1	+9.8	99.9	+4.1	+20.8	21.68	+1.9	+10.1	39.2	+1.6	+6.2	55.1	+.5	+3.6
Durable goods															
Iron and steel and their products, not including machinery	103.4	+3.4	+22.5	103.9	+4.1	+47.8	28.71	+.7	+20.6	42.3	+.5	+9.8	67.1	+.1	+8.1
Blast furnaces, steel works, and rolling mills	113.6	+1.8	+23.6	118.5	+2.3	+54.3	31.19	+.5	+24.8	42.9	−.1	+11.9	72.7	−(2)	+10.7
Bolts, nuts, washers, and rivets	88.7	+2.1	+24.8	105.8	+8.2	+55.5	27.66	+6.0	+24.6	45.4	+5.0	+16.7	61.0	+.9	+6.6
Cast-iron pipe	67.1	−1.1	+16.0	51.6	+1.8	+38.3	20.69	+3.0	+19.1	39.9	+4.7	+16.9	51.2	−1.8	+.6
Cutlery (not including silver and plated cutlery) and edge tools	88.2	+1.2	+11.0	80.6	+.5	+21.4	23.31	−.7	+9.3	42.3	−1.2	+5.9	56.1	+.3	+2.6
Forgings, iron and steel	71.1	+2.8	+26.4	68.2	+4.8	+47.1	29.86	+2.0	+16.5	44.6	+4.2	+10.4	67.3	−2.1	+5.4
Hardware	97.0	+20.8	+21.8	90.0	+10.3	+23.7	20.97	−8.7	+1.6	37.6	−9.5	−1.4	55.8	+.6	+2.6
Plumbers' supplies	91.3	+.7	+8.8	68.4	−.4	+16.0	23.45	−1.1	+6.7	39.8	−2.3	+2.6	58.8	+1.2	+3.8
Steam and hot-water heating apparatus and steam fittings	77.2	+4.8	+28.7	74.8	+8.2	+58.0	28.30	+3.2	+22.7	44.3	+4.7	+13.7	63.9	−1.4	+8.3
Stoves	108.1	+11.8	+20.2	96.8	+26.1	+31.9	26.30	+12.8	+9.6	42.7	+7.8	+7.1	62.1	+5.0	+2.9
Structural and ornamental metalwork	71.8	+1.4	+31.9	67.5	+6.6	+62.2	26.32	+5.1	+23.0	42.3	+6.9	+17.5	62.4	−1.5	+5.0
Tin cans and other tinware	98.4	+2.8	+9.6	99.4	+5.2	+20.1	22.26	+2.4	+9.6	40.1	+1.9	+7.0	56.1	+.8	+1.8
Tools (not including edge tools, machine tools, files, and saws)	99.8	+2.3	+27.8	109.3	+6.4	+42.0	25.59	+3.9	+11.2	46.0	+3.3	+7.3	55.5	+.5	+3.7
Wirework	176.1	−1.5	+23.7	156.0	−3.1	+34.4	22.54	−1.7	+9.7	38.6	−3.7	+4.0	58.5	+2.1	+5.5

See footnotes at end of table.

Table 1.—Employment, Pay Rolls, Hours, and Earnings in Manufacturing and Nonmanufacturing Industries, February 1937—Continued

Manufacturing—Continued

[Indexes are based on 3-year average 1923-25=100 and are adjusted to 1933 Census of Manufactures]

Industry	Employment			Pay rolls			Average weekly earnings [1]			Average hours worked per week [1]			Average hourly earnings [1]		
	Index February 1937	Percentage change from—		Index February 1937	Percentage change from—		February 1937	Percentage change from—		February 1937	Percentage change from—		February 1937	Percentage change from—	
		January 1937	February 1936		January 1937	February 1936		January 1937	February 1936		January 1937	February 1936		January 1937	February 1936
Durable goods—Continued															
													Cents		
Machinery, not including transportation equipment	**118.6**	**+3.2**	**+24.2**	**118.2**	**+6.5**	**+41.6**	$27.50	**+3.2**	**+14.1**	**42.6**	**+2.0**	**+8.5**	**64.3**	**+1.1**	**+5.8**
Agricultural implements	119.0	+6.9	−5.9	139.6	+6.0	+.8	26.30	−.8	+7.4	40.4	−1.1	−.3	65.2	−.3	+7.0
Cash registers, adding machines, and calculating machines	127.2	+3.1	+11.7	130.2	+7.8	+22.8	31.47	+4.5	+9.9	42.7	+2.6	+3.5	74.2	+1.8	+5.2
Electrical machinery, apparatus, and supplies	109.3	+5.1	+34.9	107.3	+10.6	+54.2	27.11	+5.2	+14.3	41.2	+3.0	+8.9	65.0	+2.2	+5.2
Engines, turbines, tractors, and water wheels	134.9	+7.7	+15.6	131.1	+8.9	+30.0	30.23	+1.1	+13.3	40.9	+1.8	+5.5	74.0	−.6	+7.7
Foundary and machine-shop products	104.4	+3.0	+26.0	105.0	+6.3	+45.9	27.94	+3.3	+15.9	44.3	+2.6	+9.9	63.0	+.8	+6.3
Machine tools	138.3	+2.5	+26.3	142.3	+3.9	+40.4	31.10	+1.4	+11.2	46.3	+1.0	+4.4	67.2	+.4	+6.6
Radios and phonographs	170.6	−8.8	+5.3	124.2	−14.9	+13.9	19.11	−6.7	+8.1	34.1	−6.1	+5.0	56.0	−.6	+3.3
Textile machinery and parts	82.5	+3.7	+17.8	87.5	+5.2	+35.9	28.42	+1.4	+15.5	45.7	+1.2	+10.7	62.4	+.1	+4.5
Typewriters and parts	146.6	+.2	+32.4	137.7	+4.9	+48.8	25.07	+4.7	+12.4	43.0	+2.7	+13.1	58.3	+1.9	+2.6
Transportation equipment	**116.0**	**+2.9**	**+16.2**	**112.3**	**+11.5**	**+45.7**	**30.67**	**+8.3**	**+25.2**	**38.7**	**+5.5**	**+18.0**	**79.5**	**+3.1**	**+6.6**
Aircraft	756.3	+4.2	+59.3	652.4	+7.6	+68.0	27.02	+3.2	+1.5	44.0	+3.2	+2.5	62.4	+.5	−2.7
Automobiles	127.4	+1.7	+12.2	121.8	+12.6	+45.3	31.48	+10.7	+29.6	38.6	+6.5	+20.3	81.7	+4.0	+8.4
Cars, electric and steam railroad	62.9	+12.9	+43.3	66.7	+13.4	+67.8	26.00	+.3	+18.0	39.8	+2.3	+14.1	65.4	−1.9	+2.5
Locomotives	50.4	+12.3	+110.5	37.2	+19.6	+170.5	28.81	+6.5	+28.5	43.3	+7.8	+22.7	66.5	−1.3	+4.7
Shipbuilding	98.7	+4.4	+17.6	97.9	+1.1	+21.5	27.53	−3.2	+3.3	35.5	−1.1	+1.1	78.3	−.2	+2.8
Railroad repair shops	**61.6**	**+.7**	**+9.8**	**63.4**	**+3.6**	**+13.4**	**29.50**	**+2.9**	**+3.3**	**42.9**	**+2.6**	**+2.9**	**69.0**	**+.1**	**+.3**
Electric railroad	63.3	−.1	+2.3	64.8	+.5	+3.7	28.94	+.6	+1.4	43.5	−.3	−2.1	64.8	+.5	+3.2
Steam railroad	61.5	+.8	+10.5	63.4	+3.7	+14.2	29.59	+2.9	+3.4	42.8	+2.8	+3.5	69.3	+(2)	+.1
Nonferrous metals and their products	**111.5**	**+4.3**	**+17.5**	**103.5**	**+6.6**	**+36.2**	**25.05**	**+2.2**	**+15.9**	**41.9**	**+1.9**	**+7.5**	**59.3**	**+.3**	**+7.9**
Aluminum manufactures	122.2	+2.8	+21.8	121.7	+6.2	+36.1	24.99	+3.3	+11.7	42.4	+3.7	+4.7	59.0	−.5	+7.0
Brass, bronze, and copper products	121.7	+2.7	+22.8	120.2	+6.3	+49.3	28.11	+3.5	+21.6	43.7	+2.2	+9.4	64.3	+1.1	+11.2
Clocks and watches and time-recording devices	120.1	+1.4	+15.1	111.0	+1.8	+23.2	21.66	+.4	+7.0	41.8	+2.0	+3.8	51.7	−1.7	+4.0
Jewelry	88.5	+4.8	+15.8	66.1	+6.1	+31.8	22.63	+1.3	+13.7	38.5	+1.8	+8.7	58.6	−(2)	+3.4
Lighting equipment	96.8	+32.0	+28.4	89.8	+29.4	+43.6	23.36	−2.0	+11.8	39.8	−3.3	+5.7	58.7	+1.1	+6.0
Silverware and plated ware	71.8	+3.6	+10.8	62.8	+9.1	+32.0	24.34	+5.2	+19.0	39.5	+6.1	+18.2	61.6	−1.0	−1.2
	78.9	−1.9	+.8	68.9	+.6	+14.9	25.74	+2.5	+13.9	41.7	+2.3	+3.7	61.8	+.2	+9.8

Silverware and plated ware	71.8	+3.6	+10.8	62.8	+9.1	+32.0	24.34	+5.2	+19.0	39.5	+6.1	+18.2	61.6	−1.0	−1.2
Smelting and refining—copper, lead, and zinc	78.9	−1.9	+.8	68.9	+.6	+14.9	25.74	+2.5	+13.9	41.7	+2.3	+3.7	61.8	+.2	+9.8
Stamped and enameled ware	159.1	+2.8	+18.1	154.9	+4.4	+35.4	22.68	+1.6	+14.7	42.0	+1.7	+6.6	54.2	+.2	+8.9
Lumber and allied products	**65.8**	**+1.2**	**+11.1**	**58.2**	**+6.0**	**+27.1**	**19.73**	**+4.6**	**+14.2**	**42.9**	**+4.6**	**+9.4**	**46.1**	**+.7**	**+1.7**
Furniture	86.1	+.2	+20.0	75.0	+5.1	+39.6	20.69	+4.9	+16.4	43.5	+4.5	+9.2	48.0	+1.0	+7.1
Lumber:															
Millwork	55.0	+2.2	+25.3	50.4	+7.1	+46.4	21.13	+4.8	+16.8	44.2	+4.0	+15.3	48.0	+.6	+.9
Sawmills	47.6	+1.7	+2.9	39.7	+6.8	+12.8	18.44	+5.0	+9.8	42.2	+4.8	+8.6	44.4	+.5	−.1
Stone, clay, and glass products	**67.2**	**+7.5**	**+21.5**	**59.8**	**+13.5**	**+41.0**	**22.66**	**+5.6**	**+16.0**	**39.4**	**+2.9**	**+10.1**	**57.8**	**+2.7**	**+4.9**
Brick, tile, and terra cotta	46.6	+2.1	+32.6	37.9	+4.4	+56.9	19.84	+2.3	+18.6	41.9	+3.1	+12.7	47.7	−.6	+5.1
Cement	58.2	+2.1	+46.0	52.6	+5.5	+79.0	22.24	+3.3	+22.5	36.8	+3.0	+16.9	60.4	+.2	+5.1
Glass	107.6	+16.0	+12.6	107.2	+26.8	+30.0	23.98	+9.3	+15.4	37.8	+2.5	+7.5	63.8	+6.5	+7.8
Marble, granite, slate, and other products	37.5	+3.4	+34.1	29.9	+5.2	+60.7	23.44	+1.7	+19.9	37.7	+4.2	+17.0	62.6	−2.6	+1.7
Pottery	77.6	+3.7	+9.5	67.6	+7.0	+22.6	23.18	+3.2	+11.9	42.6	+4.0	+9.1	54.9	−(2)	+1.0
Nondurable goods															
Textiles and their products	**110.2**	**+2.9**	**+11.1**	**100.1**	**+5.8**	**+21.6**	**18.17**	**+2.8**	**+9.4**	**37.8**	**+1.8**	**+6.6**	**47.7**	**+.8**	**+2.1**
Fabrics	103.6	+1.3	+11.3	97.6	+1.7	+24.3	17.71	+.4	+11.7	38.9	+.4	+6.7	45.4	−.1	+4.3
Carpets and rugs	100.0	+2.0	+25.8	98.3	+2.5	+46.0	23.29	+.5	+16.1	40.1	−.3	+11.5	58.0	−.2	+3.1
Cotton goods	104.3	+1.6	+16.2	100.4	+.3	+31.3	15.22	−1.3	+12.9	39.0	−1.2	+5.6	39.0	+.1	+7.2
Cotton small wares	107.0	+.2	+15.9	105.0	+.6	+26.0	18.26	+.4	+8.8	40.5	+1.3	+8.4	45.2	−.6	+1.5
Dyeing and finishing textiles	122.8	+.4	+4.3	111.9	−.2	+16.2	21.74	−.7	+11.4	40.7	−.3	+8.9	53.0	−.5	+2.2
Hats, fur-felt	90.1	+2.0	+3.9	93.9	+8.6	+20.3	28.18	+6.5	+15.8	39.7	+7.6	−.2	71.5	+.3	+11.5
Knit goods	122.7	+1.9	+8.4	126.6	+5.3	+18.2	17.89	+3.4	+9.1	38.4	+4.0	+7.6	47.7	−.8	+1.4
Silk and rayon goods	83.7	+.9	+9.5	71.4	+4.2	+26.4	16.30	+3.2	+15.2	38.6	+2.4	+14.8	42.3	+.9	+.3
Woolen and worsted goods	92.3	−.2	+4.5	82.2	−1.1	+17.3	20.52	−.9	+12.1	38.4	−1.1	+4.0	53.6	+.1	+7.7
Wearing apparel	122.6	+6.1	+10.6	100.9	+14.5	+16.6	19.56	+8.0	+5.4	35.5	+5.3	+6.4	52.3	+2.1	−1.3
Clothing, men's	114.4	+4.2	+5.5	98.9	+12.6	+13.8	20.77	+8.1	+7.8	35.8	+5.5	+9.0	56.0	+2.7	+.2
Clothing, women's	165.6	+6.9	+12.3	125.0	+16.1	+18.4	20.83	+8.5	+5.5	34.2	+4.4	+4.6	56.6	+3.3	−1.4
Corsets and allied garments	91.6	+2.8	+4.8	92.6	+8.6	+4.5	16.60	+5.6	−.5	37.8	+5.8	+2.7	43.9	+.7	−2.4
Men's furnishings	142.8	+9.8	+22.4	113.6	+21.8	+23.2	14.53	+10.8	+.6	37.7	+5.2	−.3	32.9	+2.4	−2.5
Millinery	61.5	+11.2	+13.9	50.4	+21.7	+20.3	22.38	+9.4	+5.6						
Shirts and collars	126.6	+6.2	+17.5	111.8	+12.2	+21.7	13.61	+5.7	+3.4	36.4	+6.3	+4.2	37.3	−1.6	−.8
Leather and its manufactures	**99.9**	**+2.5**	**+5.8**	**90.9**	**+5.3**	**+17.4**	**21.32**	**+2.8**	**+11.0**	**41.4**	**+2.1**	**+9.2**	**52.0**	**+.8**	**+2.1**
Boots and shoes	101.9	+2.9	+7.0	87.9	+6.7	+18.5	20.69	+3.7	+10.8	41.7	+2.3	+9.5	50.2	+.9	+1.5
Leather	97.5	+.6	+2.0	104.6	+2.1	+14.1	23.95	+1.5	+11.9	40.5	+1.1	+6.8	59.4	+.6	+4.8
Food and kindred products	**105.1**	**−.1**	**+8.7**	**101.3**	**+.8**	**+15.9**	**23.12**	**+.9**	**+6.6**	**41.7**	**+1.2**	**+5.0**	**56.1**	**+.3**	**+4.5**
Baking	132.2	+1.2	+6.8	121.9	+3.0	+12.5	23.98	+1.7	+5.5	43.3	+2.8	+6.6	55.9	−.7	+2.0
Beverages	182.1	−.1	+14.2	189.3	+.8	+18.8	30.73	+.9	+4.1	38.8	+1.0	+1.5	80.1	+(2)	+2.0
Butter	80.9	+.5	+5.4	64.1	+2.7	+10.6	22.23	+2.2	+4.8						
Canning and preserving	92.4	+2.3	+17.9	97.1	+12.5	+43.4	17.27	+10.0	+21.5	39.8	+8.6	+19.8	44.9	+2.3	+5.4
Confectionery	79.4	−.6	+6.8	75.5	−1.0	+15.2	17.08	−.4	+7.9	39.7	−2.6	+7.3	42.9	+1.6	+.2
Flour	74.7	+.3	−1.1	70.8	−.9	+1.3	23.80	−1.1	+2.5	44.0	−.6	+2.3	53.6	−.5	−.1
Ice cream	61.8	+1.2	+9.1	56.5	+1.3	+14.8	27.61	+(2)	+5.2	46.4	−.1	+2.4	58.4	−.1	+1.3
Slaughtering and meat packing	91.3	−5.3	+9.8	88.4	−7.7	+18.3	24.27	−2.5	+7.7	40.8	−3.5	+3.0	59.8	+.8	+5.4
Sugar, beet	37.3	−2.0	+17.2	43.6	+4.1	+19.1	26.88	+6.3	+1.6	39.1	+3.6	+.8	69.0	+1.9	+.9
Sugar refining, cane	75.3	+22.1	−3.3	66.2	+30.0	+6.4	23.58	+6.5	+10.0	38.2	+.2	+3.9	60.7	+7.2	+3.2
Tobacco manufactures	**60.5**	**+6.0**	**+3.1**	**52.6**	**+11.7**	**+17.1**	**15.98**	**+5.3**	**+13.6**	**36.6**	**+5.5**	**+8.4**	**43.7**	**+.1**	**+5.9**
Chewing and smoking tobacco and snuff	58.9	+3.0	+2.7	67.3	+5.5	+16.7	17.09	+2.5	+13.8	37.3	+1.4	+7.4	46.0	+1.2	+6.2
Cigars and cigarettes	60.6	+6.3	+3.1	50.8	+12.8	+17.0	15.74	+6.1	+13.7	36.5	+6.1	+8.7	43.4	+(2)	+5.7

See footnotes at end of table.

Table 1.—Employment, Pay Rolls, Hours, and Earnings in Manufacturing and Nonmanufacturing Industries, February 1937—Continued

Manufacturing—Continued

[Indexes are based on 3-year average 1923-25=100 and are adjusted to 1933 Census of Manufactures]

Industry	Employment			Pay rolls			Average weekly earnings [1]			Average hours worked per week [1]			Average hourly earnings [1]		
	Index February 1937	Percentage change from—		Index February 1937	Percentage change from—		February 1937	Percentage change from—		February 1937	Percentage change from—		February 1937	Percentage change from—	
		January 1937	February 1936		January 1937	February 1936		January 1937	February 1936		January 1937	February 1936		January 1937	February 1936
Nondurable goods—Continued													*Cents*		
Paper and printing	**105.7**	**+1.3**	**+7.0**	**100.5**	**+1.8**	**+14.6**	**$27.68**	**+0.5**	**+7.1**	**40.6**	**+0.7**	**+5.4**	**70.8**	**−0.2**	**+1.5**
Boxes, paper	101.5	+1.4	+11.7	103.2	+5.3	+23.7	20.67	+3.8	+10.7	42.7	+4.0	+9.4	48.9	+[2]	+1.5
Paper and pulp	116.1	+2.1	+7.8	113.5	+3.3	+22.4	24.58	+1.1	+13.6	43.6	+.4	+6.5	56.4	+.7	+6.2
Printing and publishing:															
Book and job	97.5	+1.3	+8.9	91.1	−.3	+15.0	29.60	−1.6	+5.5	39.9	−.7	+5.2	75.2	−1.1	+.2
Newspapers and periodicals	103.9	+.5	+2.0	98.8	+1.6	+6.1	35.83	+1.2	+4.0	36.9	+.7	+2.2	93.1	+.3	+1.9
Chemicals and allied products, and petroleum refining	**121.9**	**+1.4**	**+10.0**	**123.6**	**+3.5**	**+23.7**	**26.44**	**+2.1**	**+12.4**	**39.8**	**+1.5**	**+5.1**	**67.3**	**+1.7**	**+7.9**
Other than petroleum refining	122.4	+1.7	+11.5	123.9	+3.8	+25.8	24.44	+2.0	+12.8	41.1	+1.5	+5.6	59.9	+.3	+8.1
Chemicals	131.4	+.5	+15.5	135.2	+2.6	+30.1	28.59	+2.1	+12.7	40.9	+1.9	+3.7	69.9	+.2	+8.6
Cottonseed—oil, cake, and meal	82.1	−9.9	+10.6	67.3	−11.8	+21.5	11.34	−2.2	+9.6	50.2	−1.4	+13.1	22.7	−.7	−1.7
Druggists' preparations	110.0	+3.3	+8.2	119.3	+5.5	+18.9	23.73	+2.1	+9.8	40.7	+2.3	+8.7	55.3	−1.6	+.8
Explosives	93.2	−.9	+12.4	93.0	−4.8	+20.8	27.58	−4.0	+7.5	38.3	−3.7	−.3	72.1	−.2	+8.1
Fertilizers	96.1	+10.3	+17.5	86.9	+11.8	+38.5	14.58	+1.3	+17.7	40.7	+2.7	+19.0	35.6	−1.1	−.2
Paints and varnishes	131.2	+2.5	+9.4	127.2	+5.8	+20.0	26.74	+3.2	+9.7	42.5	+2.9	+4.9	63.1	+.3	+4.4
Rayon and allied products	370.4	+.8	+8.5	344.5	+1.9	+25.2	22.90	+1.1	+15.2	39.1	+.3	+2.3	58.6	+.8	+12.8
Soap	109.8	+9.4	+15.9	124.5	+16.2	+34.3	27.67	+6.2	+16.0	42.4	+6.4	+6.9	65.6	−.1	+8.5
Petroleum refining	119.6	+.1	+4.0	122.7	+2.7	+17.1	31.69	+2.6	+12.5	35.7	+1.0	+2.5	89.8	+2.0	+9.6
Rubber products	**101.6**	**+.3**	**+19.4**	**104.4**	**+5.0**	**+39.4**	**27.54**	**+4.8**	**+16.8**	**37.6**	**+3.0**	**+7.5**	**74.8**	**+2.5**	**+8.8**
Rubber boots and shoes	73.3	−5.2	+5.8	64.9	−2.8	+22.7	22.04	+2.5	+16.1	39.2	+1.7	+6.3	56.2	+.8	+7.7
Rubber goods, other than boots, shoes, tires, and inner tubes	141.5	+2.0	+18.5	141.2	+3.6	+37.6	23.07	+1.6	+16.0	41.9	+4.1	+13.2	55.6	+.3	+4.8
Rubber tires and inner tubes	93.4	+.8	+24.1	101.3	+7.0	+43.4	31.74	+6.2	+15.5	34.3	+2.6	+4.8	92.5	+3.5	+9.4

Nonmanufacturing

[Indexes are based on 12-month average 1929=100]

Coal mining:															
Anthracite	52.7	−2.6	−13.9	41.0	−3.9	−46.5	$22.66	−1.3	−37.9	28.3	+1.9	−36.6	79.4	−2.3	−3.6
Bituminous	84.8	+.2	+5.7	82.4	+3.0	+5.1	24.65	+2.8	−.6	31.4	+2.4	−4.2	79.7	+.6	+3.3
Metalliferous mining	69.6	+4.2	+25.4	63.4	+8.5	+48.2	28.89	+4.1	+18.1	43.9	+1.9	+7.2	65.9	+2.2	+11.0
Quarrying and nonmetallic mining	46.7	+2.1	+26.4	37.8	+9.1	+57.8	20.35	+6.8	+24.8	40.3	+5.4	+15.4	50.5	+.5	+5.8
Crude-petroleum producing	73.5	+1.1	+3.8	63.8	+4.7	+14.6	32.23	+3.6	+10.4	39.2	+.3	+6.0	80.9	+2.6	+3.4
Public utilities:															
Telephone and telegraph	74.8	+.4	+6.9	82.3	−1.9	+8.0	29.44	−2.3	+1.0	37.9	−4.7	−4.1	80.4	+2.2	+5.4
Electric light and power and manufactured gas	92.0	−.1	+6.9	93.3	+1.1	+10.2	32.90	+1.2	+3.0	40.5	+1.9	+2.5	81.6	−.4	+2.2
Electric-railroad and motor-bus operation and maintenance	72.5	+(2)	+1.1	68.7	+1.1	+.6	31.10	+1.1	−.5	46.1	+.2	−3.1	66.5	+.7	+2.8
Trade:															
Wholesale	92.0	+1.4	+8.3	74.1	+2.1	+11.2	28.68	+.6	+2.7	42.6	+1.1	+1.3	67.2	−.4	+.9
Retail	85.2	−.3	+6.9	67.9	−.1	+10.2	21.31	+.2	+3.1	43.8	−.2	−.1	52.7	+.5	+2.6
General merchandising	93.9	−1.2	+10.4	82.9	−1.1	+12.2	18.35	+.1	+1.7	46.6	−1.4	−1.4	48.4	+1.9	+3.7
Other than general merchandising	82.9	−.1	+5.8	64.8	+.1	+9.6	23.66	+.2	+3.6	44.8	+.1	+.4	54.0	+.1	+2.4
Hotels (year-round)[3]	86.4	+1.1	+4.3	72.5	+2.9	+9.0	14.44	+1.8	+4.5	48.2	+1.1	+.3	29.9	+1.5	+5.0
Laundries	88.6	+.1	+9.1	76.3	−.1	+12.6	16.20	−.2	+3.2	42.9	−.1	+1.4	37.7	−.1	+1.9
Dyeing and cleaning	76.2	−.8	+8.3	54.6	−1.7	+11.5	17.71	−.9	+3.0	41.2	+2.0	+3.2	44.5	−1.5	+.5
Brokerage	(4)	+2.5	+9.1	(4)	+3.5	+14.4	38.63	+.9	+4.9	(4)	(4)	(4)	(4)	(4)	(4)
Insurance	(4)	+.3	+1.3	(4)	+7.6	+8.9	41.61	+7.3	+7.5	(4)	(4)	(4)	(4)	(4)	(4)
Building construction	(4)	−.8	+55.1	(4)	−.5	+89.3	27.83	+.4	+21.4	31.7	+.7	+10.7	87.4	−.2	+10.0

[1] Average weekly earnings are computed from figures furnished by all reporting establishments. Average hours and average hourly earnings are computed from data supplied by a smaller number of establishments as all reporting firms do not furnish man-hours. Percentage changes over year are computed from indexes. Percentage changes over month in average weekly earnings for the manufacturing groups, for all manufacturing industries combined, and for retail trade are also computed from indexes.

[2] Less than 1/10 of 1 percent.

[3] Cash payments only; the additional value of board, room, and tips cannot be computed.

[4] Not available.

Indexes of Employment and Pay Rolls, January 1936 to February 1937

INDEXES of employment and pay rolls are given in tables 2 and 3 for all manufacturing industries combined, for the durable- and nondurable-goods groups of manufacturing industries separately, and for 13 nonmanufacturing industries including 2 subgroups under retail trade, by months, January 1936 to February 1937, inclusive. The chart on page 1286 indicates the trend of factory employment and pay rolls from January 1919 to February 1937.

The indexes of factory employment and pay rolls are computed from returns supplied by representative establishments in 89 manufacturing industries and cover only wage earners. The base used in computing these indexes is the 3-year average 1923–25 as 100. In February 1937 reports were received from 24,843 manufacturing establishments employing 4,747,470 workers whose weekly earnings were $117,387,807. The employment reports received from these establishments cover more than 55 percent of the total wage earners in all manufacturing industries of the country and more than 65 percent of the wage earners in the 89 industries included in the monthly survey of the Bureau of Labor Statistics.

Table 2.—Indexes of Employment and Pay Rolls in All Manufacturing Industries Combined and in the Durable- and Nondurable-Goods Groups, January 1936 to February 1937, Adjusted to 1933 Census of Manufactures [1]

[3-year average 1923–25=100]

Month	Manufacturing											
	Total				Durable goods [2]				Nondurable goods [3]			
	Employment		Pay rolls		Employment		Pay rolls		Employment		Pay rolls	
	1936	1937	1936	1937	1936	1937	1936	1937	1936	1937	1936	1937
January	86.8	96.5	73.8	90.7	78.7	90.4	66.9	86.6	95.4	103.0	82.5	96.0
February	86.9	99.0	73.7	95.8	78.6	93.2	66.6	92.5	95.8	105.2	82.7	99.9
March	87.9	------	77.6	------	80.2	------	71.8	------	96.1	------	84.9	------
April	89.1	------	79.3	------	82.3	------	76.0	------	96.3	------	83.5	------
May	89.8	------	80.8	------	84.0	------	78.5	------	96.0	------	83.8	------
June	90.1	------	81.1	------	84.7	------	79.0	------	95.9	------	83.9	------
July	91.2	------	80.2	------	84.6	------	75.9	------	98.2	------	85.6	------
August	93.5	------	83.5	------	84.7	------	77.0	------	102.8	------	91.8	------
September	95.5	------	83.6	------	85.7	------	77.2	------	105.9	------	91.6	------
October	96.7	------	89.0	------	89.2	------	85.3	------	104.7	------	93.7	------
November	96.9	------	90.7	------	91.0	------	88.9	------	103.3	------	92.9	------
December	98.1	------	95.2	------	92.7	------	93.4	------	104.0	------	97.5	------
Average	91.9	------	82.4	------	84.7	------	78.0	------	99.5	------	87.9	------

[1] Comparable indexes for earlier years will be found in the April 1937 issue of the Monthly Labor Review.

[2] Includes the following groups of manufacturing industries: Iron and steel; machinery; transportation equipment; railroad repair shops; nonferrous metals; lumber and allied products; and stone, clay, and glass products.

[3] Includes the following groups of manufacturing industries: Textiles and their products, leather and its manufactures, food and kindred products, tobacco manufactures, paper and printing, chemicals and allied products, products of petroleum and coal, rubber products, and a number of miscellaneous industries not included in other groups.

The indexes for nonmanufacturing industries are also computed from data supplied by reporting establishments, but the base is the 12-month average for 1929 as 100. Figures for mining, laundries, dyeing and cleaning, and building construction cover wage earners only, but the figures for public utilities, trade, hotels, brokerage, and insurance relate to all employees, including executives. For crude-petroleum producing they cover wage earners and clerical field force.

Data for both manufacturing and nonmanufacturing industries are based on reports of the number of employees and amount of pay rolls for the pay period ending nearest the 15th of the month.

Table 3.—Indexes of Employment and Pay Rolls in Selected Nonmanufacturing Industries, January 1936 to February 1937 [1]

[12-month average 1929=100]

Month	Anthracite mining				Bituminous coal mining				Metalliferous mining				Quarrying and nonmetallic mining			
	Employment		Pay rolls		Employment		Pay rolls		Employment		Pay rolls		Employment		Pay rolls	
	1936	1937	1936	1937	1936	1937	1936	1937	1936	1937	1936	1937	1936	1937	1936	1937
January	59.1	54.1	54.4	42.7	79.8	84.6	70.6	[3] 79.9	54.2	66.8	41.7	58.4	39.4	45.7	25.5	34.6
February	61.2	52.7	76.7	41.0	80.2	84.8	78.4	82.4	55.5	69.6	42.8	63.4	36.9	46.7	23.9	37.8
March	52.5	-----	42.6	-----	80.4	-----	70.2	-----	55.9	-----	45.1	-----	42.2	-----	30.9	-----
April	49.8	-----	28.6	-----	77.5	-----	62.6	-----	57.5	-----	45.5	-----	48.4	-----	36.1	-----
May	54.9	-----	56.3	-----	76.2	-----	62.2	-----	60.8	-----	47.7	-----	52.0	-----	42.1	-----
June	51.2	-----	42.0	-----	75.7	-----	61.5	-----	61.9	-----	48.2	-----	53.5	-----	44.0	-----
July	48.4	-----	37.2	-----	75.5	-----	62.6	-----	61.3	-----	46.1	-----	54.4	-----	43.9	-----
August	41.1	-----	31.4	-----	76.9	-----	65.4	-----	61.6	-----	48.2	-----	55.3	-----	46.2	-----
September	47.6	-----	34.9	-----	78.2	-----	71.0	-----	63.1	-----	50.0	-----	54.9	-----	44.8	-----
October	49.9	-----	48.5	-----	81.1	-----	79.2	-----	64.2	-----	53.7	-----	54.6	-----	46.2	-----
November	51.5	-----	40.3	-----	82.3	-----	80.7	-----	62.9	-----	54.6	-----	52.6	-----	43.5	-----
December	54.8	-----	55.4	-----	83.9	-----	85.0	-----	64.4	-----	57.7	-----	49.4	-----	39.4	-----
Average	51.8	-----	45.7	-----	79.0	-----	70.8	-----	60.3	-----	48.4	-----	49.5	-----	38.9	-----

Month	Crude-petroleum producing				Telephone and telegraph				Electric light and power, and manufactured gas				Electric-railroad and motorbus operation and maintenance [2]			
	Employment		Pay rolls		Employment		Pay rolls		Employment		Pay rolls		Employment		Pay rolls	
	1936	1937	1936	1937	1936	1937	1936	1937	1936	1937	1936	1937	1936	1937	1936	1937
January	71.1	72.7	55.7	61.0	70.1	74.4	75.0	83.8	86.1	92.1	84.8	[3] 92.3	70.7	72.5	65.0	68.0
February	70.8	73.5	55.7	63.8	69.9	74.8	76.2	82.3	86.1	92.0	84.7	93.3	71.7	72.5	68.3	68.7
March	70.9	-----	56.0	-----	70.2	-----	77.2	-----	86.8	-----	85.9	-----	71.2	-----	67.8	-----
April	71.3	-----	57.1	-----	70.8	-----	76.0	-----	88.0	-----	86.2	-----	71.3	-----	65.9	-----
May	72.7	-----	58.0	-----	71.6	-----	78.5	-----	89.0	-----	87.0	-----	71.5	-----	66.1	-----
June	73.7	-----	58.9	-----	72.1	-----	77.4	-----	90.4	-----	88.1	-----	71.7	-----	66.8	-----
July	75.4	-----	60.4	-----	73.1	-----	79.9	-----	91.7	-----	89.8	-----	72.4	-----	66.5	-----
August	75.0	-----	59.7	-----	73.5	-----	81.2	-----	93.1	-----	89.8	-----	72.4	-----	66.5	-----
September	74.5	-----	60.4	-----	73.7	-----	78.8	-----	93.5	-----	91.4	-----	72.8	-----	66.4	-----
October	73.6	-----	59.6	-----	73.8	-----	83.1	-----	94.0	-----	92.7	-----	73.1	-----	67.7	-----
November	73.2	-----	60.1	-----	73.7	-----	81.6	-----	93.5	-----	91.8	-----	73.0	-----	69.7	-----
December	72.4	-----	61.3	-----	73.6	-----	82.4	-----	93.2	-----	93.8	-----	72.5	-----	69.3	-----
Average	72.9	-----	58.6	-----	72.2	-----	78.9	-----	90.5	-----	88.8	-----	72.0	-----	67.2	-----

[1] Comparable indexes for earlier years for all of these industries, except year-round hotels, will be found in the February 1935 and subsequent issues of the Monthly Labor Review. Comparable indexes for year-round hotels will be found in the September 1935 issue of the Monthly Labor Review.

[2] Not including electric-railroad car building and repairing; see transportation equipment and railroad repair-shop groups, manufacturing industries, table 1.

[3] Revised.

Table 3.—Indexes of Employment and Pay Rolls in Selected Nonmanufacturing Industries, January 1936 to February 1937—Continued

[12-month average 1929=100]

Month	Wholesale trade				Total retail trade				Retail trade—general merchandising				Retail trade—other than general merchandising			
	Employment		Pay rolls		Employment		Pay rolls		Employment		Pay rolls		Employment		Pay rolls	
	1936	1937	1936	1937	1936	1937	1936	1937	1936	1937	1936	1937	1936	1937	1936	1937
January	85.6	90.7	66.6	72.6	80.4	85.4	62.1	68.0	88.2	95.1	76.4	83.8	78.4	82.9	59.1	64.7
February	85.0	92.0	66.6	74.1	79.7	85.2	61.6	67.9	85.1	93.9	73.9	82.9	78.3	82.9	59.1	64.8
March	85.6	.....	69.0	.....	81.9	.....	63.5	.....	90.9	.....	77.3	.....	79.5	.....	60.7	.....
April	85.7	.....	67.9	.....	85.2	.....	65.3	.....	97.4	.....	81.0	.....	82.0	.....	62.1	.....
May	84.6	.....	68.2	.....	85.0	.....	65.8	.....	95.5	.....	80.8	.....	82.3	.....	62.7	.....
June	84.6	.....	68.4	.....	85.5	.....	66.4	.....	96.4	.....	81.3	.....	82.6	.....	63.3	.....
July	85.4	.....	6.90	.....	83.2	.....	65.1	.....	90.7	.....	77.3	.....	81.2	.....	62.6	.....
August	86.3	.....	69.7	.....	82.4	.....	64.4	.....	89.4	.....	76.4	.....	80.5	.....	61.9	.....
September	88.0	.....	70.5	.....	86.6	.....	66.6	.....	98.5	.....	82.8	.....	83.5	.....	63.3	.....
October	89.0	.....	71.5	.....	88.7	.....	68.3	.....	103.9	.....	87.2	.....	84.7	.....	64.4	.....
November	89.7	.....	73.1	.....	90.1	.....	70.1	.....	109.3	.....	91.4	.....	85.1	.....	65.7	.....
December	91.0	.....	72.8	.....	99.6	.....	75.9	.....	143.4	.....	116.2	.....	88.1	.....	67.6	.....
Average	86.7	.....	69.4	.....	85.7	.....	66.3	.....	99.1	.....	83.5	.....	82.2	.....	62.7	.....

Month	Year-round hotels				Laundries				Dyeing and cleaning			
	Employment		Pay rolls		Employment		Pay rolls		Employment		Pay rolls	
	1936	1937	1936	1937	1936	1937	1936	1937	1936	1937	1936	1937
January	81.9	85.5	64.9	70.4	81.5	88.5	68.3	76.4	71.5	76.8	51.6	55.6
February	82.8	86.4	66.5	72.5	81.2	88.6	67.8	76.3	70.3	76.2	49.0	54.6
March	82.8	.....	66.0	.....	82.1	.....	69.9	.....	74.7	.....	56.4	.....
April	83.2	.....	66.3	.....	83.2	.....	70.9	.....	81.8	.....	64.1	.....
May	84.1	.....	67.0	.....	85.5	.....	75.6	.....	87.3	.....	72.2	.....
June	83.9	.....	66.6	.....	87.2	.....	75.8	.....	87.5	.....	69.2	.....
July	83.3	.....	66.0	.....	90.5	.....	79.0	.....	85.5	.....	64.8	.....
August	83.2	.....	66.1	.....	89.6	.....	76.7	.....	83.5	.....	63.2	.....
September	84.2	.....	67.5	.....	89.6	.....	76.6	.....	86.7	.....	66.1	.....
October	85.4	.....	69.6	.....	87.6	.....	75.3	.....	86.5	.....	66.7	.....
November	84.6	.....	69.6	.....	87.0	.....	74.5	.....	81.3	.....	60.2	.....
December	84.0	.....	69.8	.....	87.6	.....	76.1	.....	77.7	.....	57.3	.....
Average	83.6	.....	67.2	.....	86.1	.....	73.9	.....	81.2	.....	61.7	.....

Trend of Industrial and Business Employment, by States

A COMPARISON of employment and pay rolls, by States and geographic divisions, in January and February 1937, is shown in table 4 for all groups combined, and for all manufacturing industries combined, based on data supplied by reporting establishments. The percentage changes shown, unless otherwise noted, are unweighted—that is, the industries included in the manufacturing group and in the grand total have not been weighted according to their relative importance.

The totals for all manufacturing industries combined include figures for miscellaneous manufacturing industries in addition to the 89 manufacturing industries presented in table 1. The totals for all groups combined include all manufacturing industries and each of the nonmanufacturing industries presented in table 1 except building construction.

Table 4.—Comparison of Employment and Pay Rolls in Identical Establishments in January and February 1937, by Geographic Divisions and by States

[Figures in italics are not compiled by the Bureau of Labor Statistics, but are taken from reports issued by cooperating State organizations]

Geographic division and State	Total—all groups					Manufacturing				
	Number of establishments	Number on pay roll February 1937	Percentage change from January 1937	Amount of pay roll (1 week) February 1937	Percentage change from January 1937	Number of establishments	Number on pay roll February 1937	Percentage change from January 1937	Amount of pay roll (1 week) February 1937	Percentage change from January 1937
				Dollars					*Dollars*	
New England	**13,695**	**933,696**	**+0.9**	**21,655,528**	**+1.4**	**3,477**	**664,119**	**+1.4**	**15,073,675**	**+2.4**
Maine	792	*59,977*	+1.4	1,273,340	+1.4	279	49,930	+1.6	1,036,668	+2.2
New Hampshire	597	39,275	+2.2	820,994	+(1)	200	32,433	+2.2	661,021	+.4
Vermont	454	18,406	+1.9	404,644	+2.0	149	12,457	+2.1	273,924	+2.0
Massachusetts	[2] *8,486*	*502,413*	+.7	*11,754,957*	*+1.0*	*1,701*	*309,865*	*+1.4*	*7,032,457*	*+2.1*
Rhode Island	1,238	98,361	+.1	2,152,794	−1.3	413	80,115	+.1	1,693,509	−1.1
Connecticut	2,128	215,264	+1.4	5,248,799	+3.7	735	179,319	+1.8	4,376,116	+4.6
Middle Atlantic	**33,698**	**2,188,763**	**+1.5**	**57,517,300**	**+3.0**	**5,135**	**1,241,378**	**+2.0**	**32,064,862**	**+3.8**
New York	22,101	974,642	+1.1	26,626,618	+1.9	[3] *2,052*	*458,431*	*+2.1*	*12,327,432*	*+2.9*
New Jersey	4,035	344,477	+1.4	8,778,603	+2.4	[4] *780*	*254,017*	*+1.7*	*6,336,136*	*+3.0*
Pennsylvania	7,562	869,644	+1.9	22,112,079	+4.7	*2,303*	*528,930*	[5] *+2.3*	*13,401,294*	[5] *+5.2*
East North Central	**21,158**	**2,289,395**	**+2.5**	**62,516,762**	**+7.1**	**7,341**	**1,787,788**	**+3.3**	**49,597,843**	**+8.8**
Ohio	7,865	636,700	+3.1	17,445,453	+7.6	2,465	481,257	+4.3	13,554,386	+8.9
Indiana	*2,304*	*254,938*	*+4.1*	*6,598,608*	*+8.8*	*866*	*216,113*	*+4.8*	*5,673,443*	*+10.1*
Illinois	[6] *6,220*	*625,605*	*+1.7*	*16,446,092*	*+4.2*	*2,367*	*439,604*	*+2.5*	*11,544,594*	*+4.7*
Michigan	3,790	584,709	+2.5	17,086,354	+9.4	*916*	*497,318*	*+3.4*	*14,836,070*	*+12.7*
Wisconsin	[7] *979*	*187,443*	*+1.2*	*4,940,255*	*+5.1*	[8] *727*	*153,496*	[8] *+2.0*	*3,989,355*	[8] *+7.2*
West North Central	**11,336**	**421,384**	**+.7**	**9,915,664**	**+3.1**	**2,388**	**216,106**	**+1.4**	**5,031,924**	**+4.2**
Minnesota	2,135	84,715	+1.1	2,105,301	+2.8	411	39,645	+1.1	970,543	+3.1
Iowa	1,674	63,983	−.3	1,489,976	+2.4	408	38,139	−.3	905,625	+2.8
Missouri	3,046	172,642	+1.7	4,030,608	+5.0	871	98,650	+3.3	2,219,720	+7.5
North Dakota	517	4,829	−3.0	115,603	−.5	56	588	−2.5	16,142	+2.7
South Dakota	446	7,471	−.5	185,561	−1.6	40	1,919	−.7	43,182	−6.3
Nebraska	1,553	32,194	−.6	738,397	+.5	163	11,652	−.6	280,621	+1.3
Kansas	[9] *1,965*	*55,550*	[9] *+.3*	*1,250,218*	[9] *+1.6*	*439*	*25,513*	*−1.4*	*596,091*	*−1.2*
South Atlantic	**10,975**	**847,511**	**+1.6**	**16,717,924**	**+1.5**	**2,678**	**562,044**	**+2.0**	**10,387,500**	**+2.2**
Delaware	206	15,489	+2.1	370,460	+2.4	86	11,938	+1.9	285,765	+2.1
Maryland	*1,495*	*126,509*	*+1.0*	*2,965,560*	*+1.8*	*523*	*86,388*	[5] *+2.3*	*2,019,743*	[5] *+3.7*
District of Columbia	1,069	37,227	+.5	907,975	+.8	37	3,732	+.6	124,818	+.9
Virginia	2,146	107,988	+1.0	2,132,481	+.9	460	73,617	+.8	1,435,316	+1.2
West Virginia	1,241	154,516	+1.5	3,837,096	+1.1	240	60,119	+3.2	1,522,807	+1.9
North Carolina	1,421	164,917	+2.3	2,623,215	+2.4	576	151,348	+1.8	2,384,431	+2.4
South Carolina	759	73,969	+1.1	1,117,995	+1.1	200	66,331	+1.0	972,218	+.9
Georgia	1,515	112,859	+2.0	1,855,340	+1.5	358	87,228	+2.2	1,305,714	+1.5
Florida	1,123	54,037	+2.9	907,802	+2.3	196	21,343	+4.9	336,688	+4.5
East South Central	**4,337**	**293,722**	**+.3**	**5,222,433**	**−2.1**	**955**	**186,447**	**+.4**	**3,268,811**	**+.1**
Kentucky	1,251	80,767	−3.2	1,476,146	−12.4	264	33,549	−4.9	672,734	−7.1
Tennessee	1,292	102,954	+1.4	1,843,918	+2.0	369	77,540	+1.6	1,350,009	+1.8
Alabama	1,248	94,054	+2.3	1,627,710	+3.1	238	66,156	+1.6	1,096,148	+2.0
Mississippi	546	15,947	+.1	274,659	+3.2	84	9,202	+1.5	149,920	+6.4
West South Central	**4,226**	**185,785**	**+.5**	**4,051,060**	**+2.0**	**1,045**	**92,006**	**+.9**	**1,837,557**	**+2.4**
Arkansas	[10] *373*	*20,175*	*−.5*	*360,484*	*+.2*	*164*	*14,407*	*−.6*	*233,413*	*+.2*
Louisiana	982	46,881	+1.9	876,332	+3.5	232	25,451	+2.6	423,039	+5.5
Oklahoma	1,332	40,468	+.2	967,475	+2.0	135	11,540	−2.0	259,374	+.1
Texas	[11] *1,539*	*78,261*	*+.1*	*1,846,769*	*+1.5*	*514*	*40,608*	*+1.3*	*921,731*	*+2.3*

See footnotes at end of table.

Table 4.—Comparison of Employment and Pay Rolls in Identical Establishments in January and February 1937, by Geographic Divisions and by States—Con.

[Figures in italics are not compiled by the Bureau of Labor Statistics, but are taken from reports issued by cooperating State organizations]

Geographic division and State	Total—all groups					Manufacturing				
	Number of establishments	Number on pay roll February 1937	Percentage change from January 1937	Amount of pay roll (1 week) February 1937	Percentage change from January 1937	Number of establishments	Number on pay roll February 1937	Percentage change from January 1937	Amount of pay roll (1 week) February 1937	Percentage change from January 1937
				Dollars					*Dollars*	
Mountain	**4,240**	**130,008**	**+0.3**	**3,471,396**	**+3.9**	**563**	**34,878**	**−0.1**	**907,587**	**+4.5**
Montana	716	20,008	−.8	601,704	+3.8	81	4,326	−5.7	118,426	+2.0
Idaho	463	9,313	−3.9	239,179	−(1)	50	2,202	−9.7	55,025	−1.9
Wyoming	224	9,009	+.3	274,355	+5.5	41	1,605	+1.1	50,088	+5.6
Colorado	1,242	43,187	+(1)	1,110,070	+2.7	190	15,743	−.4	421,000	+3.7
New Mexico	322	6,928	+2.7	163,215	+4.6	30	758	+4.0	13,938	+5.5
Airzona	455	17,968	+2.9	476,181	+8.4	36	2,872	+6.7	70,521	+14.5
Utah	592	20,206	+1.1	511,085	+3.6	107	6,367	+4.6	149,036	+7.0
Nevada	226	3,389	+.7	95,607	+4.9	28	1,005	+2.7	29,553	+3.4
Pacific	**8,909**	**381,828**	**+3.1**	**10,045,182**	**+4.2**	**2,366**	**211,674**	**+4.8**	**5,583,617**	**+8.3**
Washington	3,092	93,059	+3.0	2,370,463	+6.0	555	50,722	+5.1	1,224,448	+10.0
Oregon	1,316	47,795	+1.2	1,147,513	+3.1	292	26,021	+3.1	580,137	+6.7
California	[12] *4,501*	*240,974*	*+3.5*	*6,527,206*	*+3.8*	*1,519*	*134,931*	*+5.0*	*3,779,032*	*+8.0*

[1] Less than 1/10 of 1 percent.
[2] Includes banks and trust companies, construction, municipal, agricultural, and office employment, amusement and recreation, professional services, and trucking and handling.
[3] Includes laundering and cleaning, and water, light, and power.
[4] Includes laundries.
[5] Weighted percentage change.
[6] Includes automobile, and miscellaneous services, restaurants, and building and contracting
[7] Includes construction, but not hotels and restaurants, or public works.
[8] Does not include logging.
[9] Includes financial institutions, miscellaneous services, and restaurants.
[10] Includes automobile dealers and garages, and sand, gravel and building stone.
[11] Includes business and personal service, and real estate.
[12] Includes banks, insurance, and office employment.

Industrial and Business Employment and Pay Rolls in Principal Cities

A COMPARISON of February 1937 employment and pay rolls with the January totals in 13 cities of the United States having a population of 500,000 or over is made in table 5. The changes are computed from reports received from identical establishments in both months.

In addition to reports included in the several industrial groups regularly covered in the survey by the Bureau, reports have also been secured from establishments in other industries for inclusion in these city totals. As information concerning employment in building construction is not available for all cities at this time, figures for this industry have not been included in these city totals.

Table 5.—Comparison of Employment and Pay Rolls in Identical Establishments in January and February 1937, by Principal Cities

City	Number of establishments	Number on pay roll February 1937	Percentage change from January 1937	Amount of pay roll (1 week) February 1937	Percentage change from January 1937
New York, N. Y.	16,596	686,657	+1.3	$18,541,500	+2.8
Chicago, Ill.	4,385	479,520	+1.2	13,227,030	+3.1
Philadelphia, Pa.	2,465	225,456	+.2	5,926,166	+1.5
Detroit, Mich.	1,605	397,313	+3.0	12,248,261	+7.8
Los Angeles, Calif.	2,658	156,250	+2.4	4,195,257	+2.6
Cleveland, Ohio	1,676	139,573	+3.6	3,873,548	+8.0
St. Louis, Mo.	1,523	136,075	+1.8	3,332,049	+3.4
Baltimore, Md.	1,193	96,441	+.1	2,313,298	+1.3
Boston, Mass.	3,911	186,490	+.3	4,546,884	+.3
Pittsburgh, Pa.	1,336	201,887	+3.3	5,737,983	+7.8
San Francisco, Calif.	1,633	78,820	+4.5	2,195,636	+4.3
Buffalo, N. Y.	913	76,707	+.3	2,092,204	−.9
Milwaukee, Wis.	600	81,984	−.7	2,147,954	+1.8

Unemployment in Foreign Countries in the Winter of 1936–37

ALTHOUGH the usual seasonal increase in unemployment was reflected in official statistics for foreign countries for the early winter of 1937 as compared with late 1936, there was a gratifying reduction in the volume of unemployed workers in most countries as compared with conditions existing at the same period of the previous year. Insofar as the various series of unemployment statistics may be considered as typical of general unemployment trends, it may be concluded that the substantial declines in unemployment reported during 1936, and early 1937, are indicative of a progressive movement toward more widespread employment. In Austria, Czechoslovakia, France, Germany, Great Britain, and the Irish Free State, the number in receipt of unemployment benefit or the total number of registered unemployed were lower in both January and February 1937 than in the same months of 1936. In contrast, the figures for Denmark and Poland show a higher level of unemployment in 1937 than in the previous year.

The number of registered unemployed in Great Britain was over 2 million in January and February 1936. In the following month the total dropped to 1,881,531 persons, falling to the low point of the year in October (1,611,810). During the 3 succeeding months the total increased but the figure declined in February, and in March 1937 was below the low point of the preceding year. Wider fluctuations have occurred in Germany, but the extreme gains of the summer of 1936 were not so well maintained when employment opportunities slackened with the arrival of the winter season. However, the March 1937 figure shows a significant spring decline. In France the unemployed in receipt of benefit fell below 400,000 in March 1937 for the first time in many months.

The table following gives statistics of unemployment in foreign countries as shown in official reports, by years from 1930 to 1936, and by months beginning with February 1936 and including the latest month for which figures are available.

Beyond comparisons of the figures in a single series for different periods it is not possible to use the official unemployment statistics to measure volume of unemployment in a single country or to compare conditions in one country with those in another, owing to the fact that the coverage is not always complete. For example, only insured persons may be reported in some instances, or certain classes, such as agricultural labor, may be excluded.

Statement of Unemployment in Foreign Countries

Year and date (end of month)	Australia		Austria	Belgium			
	Trade-unionists unemployed		Compulsory insurance, number of unemployed in receipt of benefit	Unemployment-insurance societies			
				Wholly unemployed		Partially unemployed	
	Number	Percent		Number	Percent	Number	Percent
1931	117,866	27.4	253,368	79,186	10.9	121,890	16.9
1932	120,454	29.4	309,969	161,468	19.0	175,259	20.7
1933	104,035	25.1	328,844	168,023	17.0	170,023	17.2
1934	86,865	20.5	287,528	182,855	19.0	166,229	17.2
1935	71,823	16.5	261,768	165,469	17.9	118,754	12.8
1936	53,992	12.2	259,185	----------	13.4	----------	10.0
1936							
February	----------	----------	321,529	168,017	18.7	101,038	11.2
March	59,621	13.4	298,714	138,962	15.6	93,574	10.5
April	----------	----------	267,047	116,935	13.1	99,856	11.2
May	----------	----------	242,227	109,777	12.2	86,424	9.7
June	57,001	12.8	230,844	100,838	11.0	99,126	10.9
July	----------	----------	221,323	105,558	11.4	84,367	9.1
August	----------	----------	217,991	108,404	11.4	92,729	9.8
September	52,482	12.0	217,211	105,978	11.3	78,948	8.4
October	----------	----------	228,624	101,070	10.8	74,537	8.0
November	----------	----------	257,063	112,881	12.1	94,332	10.1
December	46,863	10.7	290.452	131,565	14.4	92,619	10.2
1937							
January	----------	----------	316,050	131,645	14.5	97,737	10.7
February	----------	----------	309,178	----------	----------	----------	----------
March	----------	----------	277,126	----------	----------	----------	----------

Statement of Unemployment in Foreign Countries—Continued

Year and date (end of month)	Canada	Czechoslovakia			Danzig, Free City of	Denmark	
	Percent of trade-unionists unemployed	Number of unemployed on live register	Trade-union insurance funds—unemployed in receipt of benefit		Number of unemployed registered	Trade-union unemployment funds—unemployed	
			Number	Percent		Number	Percent
1931	16.8	291,332	102,179	8.3	24,898	53,019	17.9
1932	22.0	554,059	184,555	13.5	33,244	99,508	31.7
1933	22.3	738,267	247,613	16.9	31,408	97,417	28.8
1934	18.2	676,994	245,953	17.4	20,326	81,756	22.2
1935	15.4	686,269	235,623	15.9	17,983	76,195	19.8
1936	13.3	622,687	208,539	13.1	13,553	79,102	19.1
1936							
February	13.8	860,239	272,019	17.5	20,959	121,777	30.3
March	14.5	797,770	254,471	16.2	18,066	107,679	26.8
April	15.1	719,166	232,159	14.6	16,560	74,384	18.9
May	14.8	637,385	208,601	13.2	14,966	53,540	12.8
June	13.9	565,799	188,900	11.8	11,890	46,716	11.2
July	12.5	508,081	185,259	11.5	8,619	50,778	12.0
August	10.8	483,502	180,410	11.2	8,587	50,771	12.0
September	10.9	479,268	171,456	10.6	8,306	54,122	13.0
October	11.0	441,679	166,575	10.3	9,243	68,108	16.2
November	12.7	510,205	176,658	10.8	10,764	83,081	19.7
December	14.3	619,143	198,492	12.1	14,933	127,382	30.0
1937							
January	14.5	667,486	----------	----------	16,797	139,792	32.7
February	13.7	677,947	----------	----------	----------	129,044	29.9
March	12.9	627,331	----------	----------	----------	115,667	26.8

Year and date (end of month)	Estonia	Finland	France	Germany	Great Britain
	Number unemployed remaining on live register	Number of unemployed registered	Number of unemployed in receipt of benefit	Number of unemployed registered	Number of persons registered with employment exchanges
1931	3,632	11,522	56,112	4,573,218	2,668,000
1932	7,121	17,581	273,412	5,579,858	2,757,000
1933	8,210	17,139	276,033	4,733,014	2,520,616
1934	2,970	10,011	345,033	2,718,309	2,159,231
1935	1,779	7,163	426,931	[1] 2,151,039	2,036,422
1936	1,276	4,796	432,120	[1] 1,592,630	1,754,975
1936					
February	2,101	8,257	487,374	2,514,894	2,025,021
March	1,791	6,687	465,127	1,937,120	1,881,531
April	1,274	5,836	445,970	1,762,744	1,831,230
May	582	2,795	422,036	1,491,235	1,705,042
June	365	1,877	419,887	1,314,731	1,702,676
July	352	2,129	425,353	1,169,860	1,652,072
August	476	2,431	413,115	1,098,498	1,613,940
September	684	3,086	407,733	1,035,237	1,624,339
October	1,285	4,594	406,595	1,075,588	1,611,810
November	2,102	5,348	407,831	1,197,140	1,623,602
December	1,988	4,398	410,785	1,478,862	1,628,719
1937					
January	2,388	6,805	426,072	1,853,460	1,689,223
February	2,064	5,383	410,219	1,610,947	1,627,845
March	----------	4,482	388,920	1,245,353	1,601,201

[1] Includes the Saar.

Statement of Unemployment in Foreign Countries—Continued

Year and date (end of month)	Great Britain and Northern Ireland				Hungary		
	Compulsory insurance				Employment exchanges, applications for work	Trade-unionists unemployed	
	Wholly unemployed		Temporary stoppages				
	Number	Percent	Number	Percent		Christian (Budapest)	Social Democratic
1931	2,129,359	16.7	587,494	4.6	52,305	977	27,633
1932	2,272,590	17.6	573,805	4.5	66,235	1,026	29,772
1933	2,110,090	16.4	456,678	3.5	60,595	1,085	26,716
1934	1,801,913	13.9	368,906	2.9	52,157	996	22,291
1935	1,714,844	13.2	312,958	2.3	52,048	967	18,315
1936	1,497,587	11.3	251,379	1.9	52,114	800	15,637
1936							
February	1,752,279	13.4	264,299	2.0	57,199	944	18,521
March	1,638,720	12.5	240,092	1.9	58,177	882	17,887
April	1,555,829	11.9	251,667	1.9	54,421	804	17,350
May	1,467,097	11.2	229,823	1.8	52,932	795	16,718
June	1,401,665	10.7	305,875	2.4	47,738	655	15,771
July	1,357,343	10.4	302,271	2.3	46,713	645	14,651
August	1,362,033	10.4	249,906	1.9	48,221	747	13,690
September	1,384,090	10.6	236,118	1.8	50,166	710	12,876
October	1,417,391	10.6	196,370	1.5	50,655	699	12,838
November	1,429,736	10.7	191,585	1.5	50,371	841	13,815
December	1,424,451	10.7	197,722	1.5	50,863	923	15,044
1937							
January	1,489,092	11.2	187,874	1.4	54,407	969	15,640
February	1,460,026	10.9	164,739	1.3	56,192	1,012	16,148
March	1,406,530	10.5	169,740	1.3	----------	----------	----------

Year and date (end of month)	Irish Free State	Italy	Japan		Latvia	Netherlands	
	Compulsory insurance—number unemployed	Number of unemployed registered wholly unemployed	Official estimates—unemployed		Number unemployed remaining on live register	Unemployment insurance societies—unemployed	
			Number	Percent		Number	Percent
1931	25,230	734,454	422,755	6.1	8,709	82,800	18.1
1932	62,817	1,006,442	485,681	6.8	14,587	153,500	29.5
1933	72,255	1,018,955	408,710	5.6	8,156	163,000	31.0
1934	103,671	963,677	372,941	5.0	4,972	160,400	32.1
1935	[1] 119,498	----------	356,103	4.6	4,825	173,673	36.3
1936	99,834	----------	----------	----------	3,851	168,668	36.2
1936							
February	141,858	----------	357,736	4.6	8,392	193,987	41.2
March	123,336	----------	356,613	4.6	7,148	180,758	38.5
April	116,621	----------	343,426	4.4	4,450	169,619	36.2
May	109,185	----------	352,501	4.5	1,840	164,957	35.3
June	70,274	----------	344,927	4.4	1,074	162,198	34.8
July	68,959	----------	337,998	4.3	1,223	163,125	35.1
August	67,045	----------	333,634	4.2	1,128	160,252	34.5
September	68,278	----------	330,290	4.2	1,283	156,869	34.3
October	71,743	----------	327,578	4.1	2,015	150,761	33.0
November	[1] 110,859	----------	322,948	4.1	4,025	152,568	33.4
December	105,078	----------	322,969	4.1	5,613	158,749	34.7
1937							
January	100,177	----------	333,210	4.2	6,358	180,413	----------
February	91,680	----------	----------	----------	----------	148,620	----------
March	93,426	----------	----------	----------	----------	----------	----------

[1] Incomplete figures.

[3] Special employment period.

Statement of Unemployment in Foreign Countries—Continued

Year and date (end of month)	New Zealand	Norway			Poland	Rumania
	Number unemployed registered by employment exchanges [4]	Trade-unionists (10 unions) unemployed		Number unemployed remaining on live register	Number unemployed registered with employment offices	Number unemployed remaining on live register
		Number	Percent			
1931	41,430		22.3	27,479	299,502	35,851
1932	51,549	14,790	30.8	[5] 32,705	255,582	38,899
1933	46,971	16,588	33.4	[5] 35,591	249,660	29,060
1934	39,235	15,963	30.7	35,121	342,166	16,871
1935	38,234	14,783	25.3	36,103	381,935	13,852
1936	36,890	13,267	18.8	32,643		13,549
1936						
February	32,384	17,627	26.7	40,263	488,157	23,458
March	32,019	[5] 16,426	24.6	39,999	479,049	18,514
April	33,277	14,214	21.0	37,756	414,165	14,878
May	35,270	10,858	15.7	30,923	334,822	12,923
June	39,038	9,021	12.8	26,139	321,379	9,291
July	42,939	9,013	12.5	22,145	286,575	7,628
August	45,045	9,647	13.2	23,477	270,766	7,496
September	44,263	10,535	14.2	28,122	265,849	8,852
October	41,908	12,635	16.8	31,332	280,485	9,549
November	39,056	14,330	18.8	35,119		11,526
December	35,286	16,632	21.7	36,260	402,814	16,224
1937						
January	31,416			35,435	532,662	
February	28,941			34,440	545,651	
March					525,041	

Year and date (end of month)	Sweden		Switzerland				Yugoslavia
	Trade-unionists unemployed		Unemployment funds				Number of unemployed registered
			Wholly unemployed		Partially unemployed		
	Number	Percent	Number	Percent	Number	Percent	
1931	64,815	17.2		5.9		12.1	10,018
1932	89,922	22.8		9.1		12.2	14,761
1933	97,316	23.7		10.8		8.5	15,997
1934	80,216	18.9		9.8		6.1	15,647
1935	81,385	16.1		11.8		5.9	16,752
1936	[6] 71,552	[6] 13.6		13.2		5.3	19,436
1936							
February	91,893	18.0	104,400	18.6	38,000	6.9	34,136
March	86,888	17.0	85,082	15.6	37,203	6.7	30,783
April	77,005	15.0	70,700	13.0	32,800	5.9	25,695
May	57,214	11.1	60,300	11.1	31,600	5.7	16,670
June	51,670	10.1	55,826	10.1	29,143	5.3	14,002
July	46,181	9.0	56,800	10.6	30,000	5.4	10,501
August	47,144	9.0	58,300	10.9	28,500	5.1	12,135
September	49,514	9.5	60,629	11.0	28,336	5.1	11,593
October	57,128	10.9	61,100	11.5	24,000	4.3	13,780
November	67,869	12.8	65,900	12.3	20,000	3.6	14,239
December	99,776	18.5	78,864	14.3	18,176	3.3	22,069
1937							
January	85,717	15.8	87,300	16.6	17,500	3.3	35,170
February	80,637	14.5					39,510

[4] New series, from 1933 on. [5] Revised figures. [6] Preliminary figure.

BUILDING OPERATIONS

Summary of Building Construction in Principal Cities, March 1937[1]

BUILDING-construction activity, as measured by the value of permits issued, increased substantially in March. Compared with February 1937 permit valuations were 32.1 percent greater. Increases occurred in all classes of construction. The largest percentage increase, a gain of 44.5 percent, occurred in new non-residential construction. New residential construction registered an increase of 36.5 percent and additions, alterations, and repairs increased 7.0 percent.

Compared with March 1936 the permit value of new residential building construction increased 87.2 percent; additions, alterations, and repairs increased 36.1 percent; and new nonresidential construction dropped 4.8 percent. The gain in the total value of all building construction over the corresponding month of last year was 35.9 percent.

Comparisons of March 1937 with February 1937 and March 1936

A SUMMARY of building construction in 1,523 identical cities in March 1936 and February and March 1937 is given in table 1.

Table 1.—Summary of Building Construction in 1,523 Identical Cities, March 1937

Class of construction	Number of buildings			Estimated cost		
	March 1937	Percentage change from—		March 1937	Percentage change from—	
		February 1937	March 1936		February 1937	March 1936
All construction	58,529	+61.1	+23.5	$170,510,244	+32.1	+35.9
New residential	14,167	+63.2	+55.2	84,882,867	+36.5	+87.2
New nonresidential	9,966	+66.9	+20.6	54,322,042	+44.5	−4.8
Additions, alterations, and repairs	34,396	+58.7	+14.6	31,305,335	+7.0	+36.1

A summary of the estimated cost of housekeeping dwellings and of the number of families provided for in new dwellings in 1,523 identical cities, having a population of 2,500 and over, is shown in table 2 for the months of March 1936 and February and March 1937.

[1] More detailed information by geographic divisions and individual cities is given in a separate pamphlet entitled "Building Construction, March 1937", copies of which will be furnished upon request.

Table 2.—Estimated Cost of Housekeeping Dwellings and Number of Families Provided for in 1,523 Identical Cities, March 1937

Type of dwelling	Estimated cost of housekeeping dwellings			Number of families provided for in new dwellings		
	March 1937	Percentage change from—		March 1937	Percentage change from—	
		February 1937	March 1936		February 1937	March 1936
All types	$83,919,287	+36.5	+87.1	20,964	+33.7	+82.1
1-family	59,154,969	+65.7	+60.7	13,104	+67.1	+54.4
2-family [1]	3,341,273	+37.4	+61.0	1,166	+33.4	+49.9
Multifamily [2]	21,423,045	−8.2	+258.1	6,694	−3.8	+197.8

[1] Includes 1- and 2-family dwellings with stores.
[2] Includes multifamily dwellings with stores.

Analysis by Size of City, February and March 1937

THE estimated cost of building construction for which permits were issued in the 1,523 identical cities reporting for the months of February and March 1937, together with the number of family-dwelling units provided in new dwellings, by population groups, is given in table 3.

Table 3.—Estimated Cost of Building Construction and Number of Families Provided for in New Dwellings in 1,523 Identical Cities, by Size of City, February and March 1937

Population group	Total building construction			Number of families provided for in—							
	Mar. 1937	Feb. 1937	Percentage change	All types		1-family dwellings		2-family dwellings [1]		Multifamily dwellings [2]	
				Mar. 1937	Feb. 1937	Mar. 1937	Feb. 1937	Mar. 1937	Feb. 1937	Mar. 1937	Feb. 1937
Total, all groups	$170,510,244	$129,028,824	+32.1	20,964	15,678	13,104	7,842	1,166	874	6,694	6,962
500,000 and over	73,399,337	64,136,914	+14.4	9,176	8,539	3,428	2,137	251	189	5,497	6,213
100,000 and under 500,000	34,928,250	21,650,706	+61.3	3,700	2,449	2,938	1,864	328	269	434	316
50,000 and under 100,000	12,640,179	10,025,545	+26.1	1,558	996	1,267	747	140	116	151	133
25,000 and under 50,000	14,339,208	9,671,922	+48.3	1,573	958	1,300	758	121	103	152	97
10,000 and under 25,000	21,169,112	11,974,791	+76.8	2,710	1,501	2,292	1,260	162	110	256	131
5,000 and under 10,000	9,090,627	5,748,634	+58.1	1,407	776	1,156	671	115	61	136	44
2,500 and under 5,000	4,943,531	5,820,312	−15.1	840	459	723	405	49	26	68	28

[1] Includes 1- and 2-family dwellings with stores.
[2] Includes multifamily dwellings with stores.

Construction During First 3 Months, 1936 and 1937

CUMULATIVE totals for the first 3 months of 1937 compared with the same months of the preceding year are shown in table 4. The data are based on reports received from cities having a population of 2,500 and over.

Table 4.—Estimated Cost of Building Construction in Cities of 2,500 Population and Over, First 3 Months of 1936 and of 1937, by Class of Construction

Class of construction	Estimated cost of building construction, first 3 months of—		Percentage change
	1937	1936	
All construction	$398,279,569	$292,281,225	+36.3
New residential	188,684,137	111,043,613	+69.9
New nonresidential	127,235,189	121,067,623	+5.1
Additions, alterations, and repairs	82,360,243	60,169,989	+36.9

Table 5 presents the number of family-dwelling units provided in cities with a population of 2,500 and over, for the first 3 months of 1936 and 1937.

Table 5.—Number of Family-Dwelling Units Provided in Cities of 2,500 Population and Over, First 3 Months of 1936 and of 1937, by Type of Dwelling

Type of dwelling	Number of families provided for in new dwellings, first 3 months of—		Percentage change
	1937	1936	
All types	47,309	26,689	+77.3
1-family	27,995	17,461	+60.3
2-family [1]	2,797	1,518	+84.3
Multifamily [2]	16,517	7,710	+114.2

[1] Includes 1- and 2-family dwellings with stores.
[2] Includes multifamily dwellings with stores.

The information on building permits issued during March 1936 and during February and March 1937 is based on reports received by the Bureau of Labor Statistics from 1,523 identical cities having a population of 2,500 and over.

The information is collected by the Bureau of Labor Statistics direct from local building officials, except in the States of Illinois, Massachusetts, New Jersey, New York, North Carolina, and Pennsylvania, where the State departments of labor collect and forward the information to the Bureau. The cost figures shown in this report are estimates made by prospective builders on applying for permits to build. No land costs are included. Only building projects within the corporate limits of the cities enumerated are included in the Bureau's tabulation. In addition to permits issued for private building construction, the statistics include the value of contracts awarded for Federal and State buildings in the cities covered. Information concerning public building is collected by the Bureau from the various Federal and State agencies having the power to award contracts for building construction. The information concerning public building is then added to the data concerning private construction received from local building officials. In March 1936 the value

of Federal and State buildings for which contracts were awarded in these 1,523 cities amounted to $5,937,000; in February 1937, to $14,753,000; and in March 1937, to $6,318,000.

Construction From Public Funds

THE value of contracts awarded and force-account work started during February and March 1937 on various types of construction projects financed from Federal funds is shown in table 6.

Table 6.—Value of Contracts Awarded and Force-Account Work Started on Projects Financed From Federal Funds, March 1936, February and March 1937 [1]

Federal agency	Value of contracts awarded and force-account work started		
	March 1937	February 1937 [2]	March 1936 [2]
Total	[3] $52,545,575	[4] $97,158,059	[5] $109,188,484
Public Works Administration:			
Federal	475,598	2,809,634	2,274,439
Non-Federal:			
N. I. R. A	[3] 2,223,067	4,747,519	16,266,090
E. R. A. A. 1935 and 1936	14,854,052	[4] 26,900,999	[5] 37,144,844
Federal projects under The Works Program	5,200,773	11,868,984	36,587,626
Regular governmental appropriations	29,792,085	50,830,923	16,915,485

[1] Preliminary, subject to revision.
[2] Revised.
[3] Includes $287,731 low-cost housing projects (Housing Division, P. W. A.).
[4] Includes $101,624 low-cost housing projects (Housing Division, P. W. A.).
[5] Includes $141,861 low-cost housing projects (Housing Division, P. W. A.).

The value of public-building and highway-construction awards financed wholly from appropriations from State funds, as reported by the various State governments for March 1936 and February and March 1937 is shown in table 7.

Table 7.—Value of Public-Building and Highway-Construction Awards Financed Wholly From State Funds

Type of project	Value of contracts		
	March 1937	February 1937	March 1936
Public buildings	$469,155	$2,639,841	$2,645,168
Highway construction	1,870,835	2,033,570	5,126,403

Review of Construction in 1936[1]

THE expansion of building construction which started in 193 was continued during 1936. Reports received by the Bureau o Labor Statistics from 824 cities with a population of 10,000 or over indicate that permits were issued for buildings valued at $1,352,980,00 in 1

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All construction	559,984	452,135	+23.9	$1,352,979,606	$841,888,264	+60.7
New residential	100,083	53,644	+86.6	624,170,283	293,248,571	+112.8
New nonresidential	102,999	80,115	+28.6	429,533,223	319,501,686	+34.4
Additions, alterations, and repairs	356,902	318,376	+12.1	299,276,100	229,138,007	+30.6

All nine geographic divisions registered increases in indicated expenditures for building construction, comparing 1936 with 1935. The increases ranged from 24.2 percent in the West North Central States to 96.3 percent in the East North Central States. Six of the nine divisions showed increases of more than 50 percent. The gains

[1] More detailed information by geographic divisions and individual cities is given in a separate pamphlet entitled "Building Construction, February 1937, with Annual Review for 1936", copies of which will be furnished upon request.

recorded for new residential buildings were much more pronounced than for any other type of construction, six of the nine divisions showing increases of more than 100 percent. In the East South Central States the increase amounted to more than 200 percent. Moreover, a gain of 98.8 percent is shown in the number of new dwelling units provided, five divisions showing increases of more

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All divisions	Dollars 429,533,223	Dollars 319,501,686	+34.4	Dollars 299,276,100	Dollars 229,138,007	+30.6	55,830,826	824
New England	26,822,070	24,336,114	+10.2	28,544,661	23,479,890	+21.6	5,396,308	114
Middle Atlantic	102,855,434	88,557,502	+16.1	93,968,109	72,047,664	+30.4	17,153,228	184
East North Central	93,167,399	54,311,320	+71.5	58,869,911	37,922,863	+55.2	14,244,568	195
West North Central	21,130,167	21,623,803	−2.3	17,065,509	13,619,130	+25.3	4,110,256	72
South Atlantic	52,993,134	44,077,522	+20.2	34,596,775	29,616,855	+16.8	4,422,996	83
East South Central	17,245,928	11,258,838	+53.2	8,138,471	7,201,457	+13.0	1,964,873	36
West South Central	36,773,919	24,380,772	+50.8	13,432,745	10,622,043	+26.5	2,923,192	51
Mountain	11,130,223	5,787,182	+92.3	6,715,740	5,795,062	+15.9	939,353	25
Pacific	67,414,949	45,168,633	+49.3	37,944,179	28,833,043	+31.6	4,676,052	64

Comparison With 1935, by Geographic Division

AN ANALYSIS of the number and classification of building construction awards in 824 identical cities in 1935 and 1936, by geographic divisions, is given in table 3.

Review of Construction in 1936[1]

THE expansion of building construction which started in 193 was continued during 1936. Reports received by the Bureau o Labor Statistics from 824 cities with a population of 10,000 or ove indicate that permits were issued for buildings valued at $1,352,980,00 in 1936, an increase of 60.7 percent as compared with 1935.

Previous to 1935 building construction activity had decline steadily for 10 years. In 1935 there was a marked improvement over the previous year and the further expansion in 1936 brought the total volume of building construction to the highest level of any year since 1931. The value of new residential buildings for which permits were issued in 1936 showed an increase of 112.8 percent over 1935.

Except for public buildings and stables and barns, all types of new nonresidential buildings also showed gains in indicated expenditures. The greatest increase in valuation, 134.6 percent, was shown for office buildings. The value of factory buildings for which permits were issued in the cities for which information is available amounted to over $50,000,000 in 1936, an increase of more than 51 percent compared with the previous year. More than $85,000,000 was spent for the erection of school buildings, an increase of 54.5 percent.

The value of additions, alterations, and repairs to existing buildings amounted to $300,000,000. This is an increase of $70,000,000, or more than 30 percent, compared with the preceding year.

A summary of the outstanding developments in building construction in 1936 is given in table 1.

Table 1.—Summary of Building Construction in 824 Identical Cities, 1935 and 1936

Class of construction	Number of buildings			Estimated cost		
	1936	1935	Percentage change	1936	1935	Percentage change
All construction	559,984	452,135	+23.9	$1,352,979,606	$841,888,264	+60.7
New residential	100,083	53,644	+86.6	624,170,283	293,248,571	+112.8
New nonresidential	102,999	80,115	+28.6	429,533,223	319,501,686	+34.4
Additions, alterations, and repairs	356,902	318,376	+12.1	299,276,100	229,138,007	+30.6

All nine geographic divisions registered increases in indicated expenditures for building construction, comparing 1936 with 1935. The increases ranged from 24.2 percent in the West North Central States to 96.3 percent in the East North Central States. Six of the nine divisions showed increases of more than 50 percent. The gains

[1] More detailed information by geographic divisions and individual cities is given in a separate pamphlet entitled "Building Construction, February 1937, with Annual Review for 1936", copies of which will be furnished upon request.

recorded for new residential buildings were much more pronounced than for any other type of construction, six of the nine divisions showing increases of more than 100 percent. In the East South Central States the increase amounted to more than 200 percent. Moreover, a gain of 98.8 percent is shown in the number of new dwelling units provided, five divisions showing increases of more than 100 percent. Eight of the nine areas showed a pickup in the value of new nonresidential buildings. All geographic divisions registered gains in the value of additions, alterations, and repairs to existing structures. (See table 2.)

Table 2.—Estimated Cost of Building Construction for Which Permits Were Issued in 824 Identical Cities, 1935 and 1936

Geographic division	Total construction (estimated cost)			New residential buildings					
				Estimated cost			Families provided for in new dwellings		
	1936	1935	Percentage change	1936	1935	Percentage change	1936	1935	Percentage change
	Dollars	*Dollars*		*Dollars*	*Dollars*				
All divisions	1,352,979,606	841,888,264	+60.7	624,170,283	293,248,571	+112.8	153,237	77,083	+98.8
New England	98,741,379	68,758,009	+43.6	43,374,648	20,942,005	+107.1	8,088	3,895	+107.7
Middle Atlantic	384,969,037	253,523,764	+51.8	188,145,494	92,918,598	+102.4	46,107	23,510	+96.1
East North Central	283,102,603	144,211,887	+96.3	131,065,293	51,977,704	+152.2	24,538	10,895	+125.2
West North Central	66,297,399	53,378,527	+24.2	28,101,723	18,135,594	+55.0	7,665	5,032	+52.3
South Atlantic	155,974,075	113,778,493	+37.1	68,384,166	40,084,116	+70.6	19,450	12,237	+58.9
East South Central	46,762,178	24,259,024	+92.8	21,377,779	5,798,729	+268.7	6,244	2,101	+197.2
West South Central	86,546,581	51,792,958	+67.1	36,339,917	16,790,143	+116.4	11,981	6,450	+85.8
Mountain	30,089,517	17,759,618	+69.4	12,243,554	6,177,374	+98.2	3,513	1,677	+109.5
Pacific	200,496,837	114,425,984	+75.2	95,137,709	40,424,308	+135.3	25,651	11,286	+127.3

Geographic division	New nonresidential dwellings (estimated cost)			Additions, alterations, and repairs (estimated cost)			Population (census of 1930)	Number of cities
	1936	1935	Percentage chge.	1936	1935	Percentage chge.		
	Dollars	*Dollars*		*Dollars*	*Dollars*			
All divisions	429,533,223	319,501,686	+34.4	299,276,100	229,138,007	+30.6	55,830,826	824
New England	26,822,070	24,336,114	+10.2	28,544,661	23,479,890	+21.6	5,396,308	114
Middle Atlantic	102,855,434	88,557,502	+16.1	93,968,109	72,047,664	+30.4	17,153,228	184
East North Central	93,167,399	54,311,320	+71.5	58,869,911	37,922,863	+55.2	14,244,568	195
West North Central	21,130,167	21,623,803	−2.3	17,065,509	13,619,130	+25.3	4,110,256	72
South Atlantic	52,993,134	44,077,522	+20.2	34,596,775	29,616,855	+16.8	4,422,996	83
East South Central	17,245,928	11,258,838	+53.2	8,138,471	7,201,457	+13.0	1,964,873	36
West South Central	36,773,919	24,380,772	+50.8	13,432,745	10,622,043	+26.5	2,923,192	51
Mountain	11,130,223	5,787,182	+92.3	6,715,740	5,795,062	+15.9	939,353	25
Pacific	67,414,949	45,168,633	+49.3	37,944,179	28,833,043	+31.6	4,676,052	64

Comparison With 1935, by Geographic Division

AN ANALYSIS of the number and classification of building construction awards in 824 identical cities in 1935 and 1936, by geographic divisions, is given in table 3.

Table 3.—Number of Buildings for Which Permits Were Issued in 824 Identical Cities, 1935 and 1936

Geographic division	Total construction		New residential buildings		New nonresidential buildings		Additions, alterations, and repairs	
	1936	1935	1936	1935	1936	1935	1936	1935
All divisions	559,984	452,135	100,083	53,644	102,999	80,115	356,902	318,376
Percentage change	+23.9		+86.6		+28.6		+12.1	
New England	50,118	43,847	6,189	3,750	9,699	8,447	34,230	31,650
Middle Atlantic	112,357	91,026	17,067	9,956	16,000	14,190	79,290	66,880
East North Central	109,370	79,466	17,500	7,525	28,318	19,526	63,552	52,415
West North Central	37,874	33,945	6,863	4,840	9,212	7,988	21,799	21,117
South Atlantic	67,168	58,314	13,577	8,570	9,715	7,677	43,876	42,067
East South Central	24,176	19,545	3,638	1,772	2,862	2,135	17,676	15,638
West South Central	37,652	33,344	10,202	5,865	4,900	4,319	22,550	23,160
Mountain	15,739	13,816	3,038	1,549	2,666	2,210	10,035	10,057
Pacific	105,530	78,832	22,009	9,817	19,627	13,623	63,894	55,392

All nine geographic divisions showed pronounced gains in the number of new residential buildings. Increases in all nine geographic divisions were also shown in the number of new nonresidential buildings, and seven of the nine geographic divisions showed gains in the number of additions, alterations, and repairs to existing buildings.

Comparison by Kind of Building, 1936

PREVIOUS to 1936 the Bureau's building permit series covered only cities having a population of 10,000 or over. Beginning with January 1936 the Bureau increased its coverage to include cities having a population of 2,500 and over. Reports were received from 1,689 of the 3,165 cities having a population of 2,500 or more.

The number and cost of the different types of buildings for which permits were issued in these 1,689 cities during 1936, together with the average cost per buildings, are given in table 4.

Permits were issued in these cities for 238,813 new buildings to cost nearly $1,221,000,000; 50.8 percent for new residential and 49.2 percent for new nonresidential buildings. Of the new residential buildings, one-family dwellings were by far the most numerous, comprising 46.8 percent of all new buildings. Private garages were the most numerous class of nonresidential buildings. Of the indicated expenditures for new construction, 59.4 percent was for residential buildings and 40.6 percent for nonresidential buildings. One-family dwellings accounted for 39.9 percent of all expenditures for new construction and apartment houses accounted for 16.5 percent of the total. In new nonresidential construction, four classes of buildings; schools and libraries, stores and mercantile biuldings, factories and workshops, and public buildings accounted for more than two-thirds of the total expenditures for new buildings.

In the residential group, the average costs ranged from $3,764 for one- and two-family dwellings with stores to approximately $78,000

for apartment houses with stores. In the nonresidential group the range was much greater, the average cost of the private garages being only $266 and the average cost of institutional buildings averaged more than $135,000. More than $21,000,000 was spent for amusement buildings during the year and $10,000,000 for churches.

Table 4.—Number of Buildings and Estimated Cost of Building Construction for Which Permits Were Issued in 1,689 Cities, 1936, by Kind of Building

Kind of building	Buildings for which permits were issued				
			Estimated cost		
	Number	Percent	Amount	Percent	Average per building
Residential buildings:					
1-family dwellings	111,819	46.8	$487,616,458	39.9	$4,361
2-family dwellings	4,285	1.8	22,768,747	1.9	5,314
1- and 2-family dwellings with stores combined	936	.4	3,523,115	.3	3,764
Multifamily dwellings	3,700	1.6	187,387,878	15.3	50,645
Multifamily dwellings with stores combined	185	.1	14,530,360	1.2	78,542
Hotels	84	(1)	4,615,019	.4	54,941
Lodging houses	25	(1)	139,634	(1)	5,585
All other	180	.1	4,933,632	.4	27,409
Total	121,214	50.8	725,514,843	59.4	5,985
Nonresidential buildings:					
Amusement buildings	1,083	.5	21,627,585	1.8	19,970
Churches	685	.3	10,482,407	.9	15,303
Factories and workshops	2,648	1.1	71,037,854	5.8	26,827
Public garages	1,064	.4	8,681,600	.7	8,159
Private garages	75,892	31.8	20,204,222	1.7	266
Service stations	4,384	1.8	14,678,089	1.2	3,348
Institutions	231	.1	31,257,412	2.6	135,313
Office buildings	477	.2	21,336,381	1.7	44,730
Public buildings	575	.2	70,988,148	5.8	123,458
Public works and utilities	569	.2	31,993,466	2.6	56,228
Schools and libraries	952	.4	98,037,928	8.0	102,981
Sheds	16,241	6.8	5,085,116	.4	313
Stables and barns	630	.3	597,088	(1)	948
Stores and warehouses	10,597	4.4	85,069,846	7.0	8,028
All other	1,571	.7	4,402,968	.4	2,803
Total	117,599	49.2	495,480,110	40.6	4,213
Total, new buildings	238,813	100.0	1,220,994,953	100.0	5,113
Additions, alterations, and repairs:					
On residential buildings:					
Housekeeping dwellings	279,691	----	127,490,674	----	456
Nonhousekeeping dwellings	4,001	----	5,490,146	----	1,372
On nonresidential buildings	105,239	----	189,699,327	----	1,803
Total, alterations and repairs	388,931	----	322,680,147	----	830
Grand total	627,744	----	1,543,675,100	----	2,459

[1] Less than 1/10 of 1 percent.

The permit valuation of additions, alterations, and repairs to existing buildings in 1936 amounted to $323,000,000. Of this amount, $133,000,000 was for repairs to residential buildings and $190,000,000 for repairs to nonresidential structures.

The number and cost of the different types of buildings for which permits were issued in 824 identical cities of the United States for the years 1935 and 1936, together with the percent of increase or decrease in 1936 compared with the previous year, are shown in table 5.

Table 5.—Number of Buildings and Estimated Cost of Building Construction for Which Permits Were Issued in 824 Identical Cities, 1935 and 1936

Type of building	Buildings for which permits were issued				Percentage change, 1936 compared with 1935	
	1936		1935			
	Number	Estimated cost	Number	Estimated cost	Number	Estimated cost
Residential buildings:						
1-family dwellings	91,989	$400,411,967	49,579	$203,891,360	+85.5	+96.
2-family dwellings	3,689	20,196,348	2,053	11,156,052	+79.7	+81.
1- and 2-family dwellings with stores combined	746	2,900,614	387	1,642,891	+92.8	+76.
Multifamily dwellings	3,369	182,121,069	1,459	69,130,259	+130.9	+163.
Multifamily dwellings with stores combined	140	13,727,260	59	3,226,650	+137.3	+325.
Hotels	33	858,919	13	448,039	+153.8	+91.
Lodging houses	11	80,484	16	72,047	−45.5	+11.
All other	106	3,873,622	78	3,681,273	+35.9	+5.
Total	100,083	624,170,283	53,644	293,248,571	+86.6	+112.
Nonresidential buildings:						
Amusement buildings	784	18,371,065	574	12,601,478	+36.5	+45.
Churches	545	9,315,441	491	7,391,051	+11.0	+26.
Factories and workshops	2,222	51,785,218	1,611	34,199,267	+37.9	+51.
Public garages	843	7,733,433	565	3,783,311	+49.2	+104.
Private garages	68,287	18,237,128	50,907	12,284,822	+34.1	+48.
Service stations	3,628	12,227,316	3,657	11,164,972	−.8	+9.
Institutions	195	28,618,437	113	21,180,907	+72.6	+35.
Office buildings	421	20,261,763	220	8,635,435	+91.4	+134.
Public buildings	437	63,184,484	451	76,655,696	−3.2	−21.
Public works and utilities	445	27,927,311	395	27,030,980	+12.7	+3.
Schools and libraries	788	[85,722,236	437	55,492,178	+80.3	+54.
Sheds	13,356	4,171,856	12,246	3,602,685	+9.1	+15.
Stables and barns	482	420,755	532	585,853	−10.4	−39.
Stores and warehouses	9,120	77,381,994	7,011	43,019,417	+30.1	+79.
All other	1,446	4,174,786	905	1,873,634	+59.8	+122.
Total	102,999	429,533,223	80,115	319,501,686	+28.6	+34.
Total, new buildings	203,082	1,053,703,506	133,759	612,750,257	+51.8	+72.
Additions, alterations, and repairs	356,902	299,276,100	318,376	229,138,007	+12.1	+30.
Grand total	559,984	1,352,979,606	452,135	841,888,264	+23.9	+60.

All types of residential structures showed increases in estimated cost, comparing 1936 with 1935. Indicated expenditures for apartment houses registered by far the greatest gain. Indicated expenditures for all types of new nonresidential buildings, except public buildings and stables and barns, showed gains over the previous year, the largest increase, 134.6 percent, being registered by office buildings.

In the 824 cities having a population of 10,000 or over which reported to the Bureau of Labor Statistics dwelling units were provided for 153,237 families in 1936. This compares with 77,08 dwelling units in 1935. Of the total number of dwelling units provided in 1936, nearly 92,000 (60.0 percent) were in one-family dwellings, against 53,031 (34.6 percent) in multifamily dwellings including multifamily dwellings with stores. By contrast, 64.3 percent of the dwelling units provided in 1935 were in one-family dwellings, and 29. percent in apartment houses. There was a slight increase in the percentage of families provided for in two-family dwellings and one- and 2-family dwellings with stores combined. (See table 6.)

Table 6.—Number and Percentage of Family-Dwelling Units Provided in 824 Identical Cities, 1935 and 1936

Type of dwelling	Number of new buildings for which permits were issued		Families provided for			
			Number		Percentage	
	1936	1935	1936	1935	1936	1935
All types	99,933	53,537	153,237	77,083	100.0	100.0
1-family	91,989	49,579	91,989	49,579	60.0	64.3
2-family	3,689	2,053	7,378	4,106	4.8	5.3
1- and 2-family dwellings with stores combined	746	387	839	456	.6	.6
Multifamily	3,369	1,459	50,206	21,861	32.8	28.4
Multifamily dwellings with stores combined	140	59	2,825	1,081	1.8	1.4

Analysis by Size of City, 1936

PER CAPITA expenditures for building construction in 1936 varied considerably with the size of the city. For all building construction the per capita expenditures ranged from $22.02, in cities with a population of 50,000 and under 100,000, to $42.67 in cities with a population of 2,500 and under 5,000. (See table 7.)

Table 7.—Per Capita Expenditure for Building Construction, Together With the Number of Families Provided for per 10,000 Population, in 1,689 Cities, by Size of City, 1936

Population group	Number of cities	Population (census of 1930)	Total construction		New residential buildings			
			Estimated valuation	Expenditure per capita	Estimated valuation	Expenditure per capita	Families provided for	Families provided for per 10,000 population
			Dol.	*Dol.*	*Dol.*	*Dol.*		
Total, all groups	1,689	60,584,171	1,543,675,100	25.48	725,514,843	11.97	176,838	29.2
500,000 and over	14	21,315,411	544,484,150	25.54	274,257,861	12.86	67,486	31.7
100,000 and under 500,000	79	15,010,325	342,059,701	22.79	143,421,122	9.56	35,451	23.6
50,000 and under 100,000	98	6,495,615	143,026,485	22.02	57,659,266	8.88	13,878	21.4
25,000 and under 50,000	172	6,007,038	140,077,650	23.32	56,570,438	9.42	13,930	23.2
10,000 and under 25,000	484	7,376,328	191,608,670	25.98	97,738,876	13.25	23,760	32.2
5,000 and under 10,000	391	2,736,890	112,322,894	41.04	66,966,106	24.47	14,966	54.7
2,500 and under 5,000	451	1,642,564	70,095,550	42.67	28,901,174	17.59	7,367	44.9

Population group	New nonresidential buildings		Additions, alterations, and repairs					
			Total		Residential		Nonresidential	
	Estimated valuation	Expenditure per capita	Estimated valuation	Expenditure per capita	Estimated valuation	Expenditure per capita	Estimated valuation	Expenditure per capita
	Dol.	*Dol.*	*Dol.*	*Dol.*	*Dol.*	*Dol.*	*Dol.*	*Dol.*
Total, all groups	495,480,110	8.18	322,680,147	5.33	132,980,820	2.20	189,699,327	3.13
500,000 and over	150,020,193	7.04	120,206,096	5.64	47,793,124	2.24	72,412,972	3.40
100,000 and under 500,000	123,887,176	8.25	74,751,403	4.98	26,017,869	1.73	48,733,534	3.25
50,000 and under 100,000	49,934,115	7.69	35,433,104	5.45	14,861,900	2.29	20,571,204	3.16
25,000 and under 50,000	51,318,096	8.54	32,189,116	5.36	14,277,204	2.38	17,911,912	2.98
10,000 and under 25,000	55,897,887	7.58	37,971,907	5.15	18,391,817	2.49	19,580,090	2.66
5,000 and under 10,000	30,217,594	11.04	15,139,194	5.53	8,066,389	2.95	7,072,805	2.58
2,500 and under 5,000	34,205,049	20.82	6,989,327	4.26	3,572,517	2.18	3,416,810	2.08

The per capita expenditure for residential construction was nearly twice as great in cities having a population of 5,000 and under 10,000 as in the cities having a population of over 500,000. It will be observed that cities with a population of 5,000 and under 10,000 were building new dwellings at the rate of 54.7 units per 10,000 of population, but in cities having a population of 50,000 and under 100,000 only 21.4 new dwelling units for each 10,000 inhabitants were provided. The average number of families provided for in the cities included in the sample was 29.2 per 10,000 inhabitants.

The per capita expenditure for new nonresidential buildings averaged $8.18. The lowest expenditure per inhabitant, $7.04, was shown in the 14 cities having a population of a half million and over, the highest, $20.82, in the cities with a population of 2,500 to 5,000.

There was very little difference in average expenditures for additions, alterations, and repairs in the various population groups.

Long Time Trend in Construction, 1921 to 1936

Building permit data are available for 257 identical cities since 1921. Information concerning expenditures for the different types of building operations and for the number of families provided for is shown in table 8 for these 257 cities for the years 1921 to 1936, inclusive.

For the first time since 1931 more than $1,000,000,000 was spent for building construction in these 257 cities. This is more than double the indicated expenditures for building construction recorded in any one of the 3 years, 1932, 1933, or 1934, but is only slightly more than a fourth the amount spent in 1925, the peak year.

The estimated cost of new residential buildings for which permits were issued in 1936 was greater than for any year since 1930, the index number for 1936 on a 1921 base being 50.4. The low point, in 1934, was 8.1; and the peak was in 1925, when the index reached 262.6.

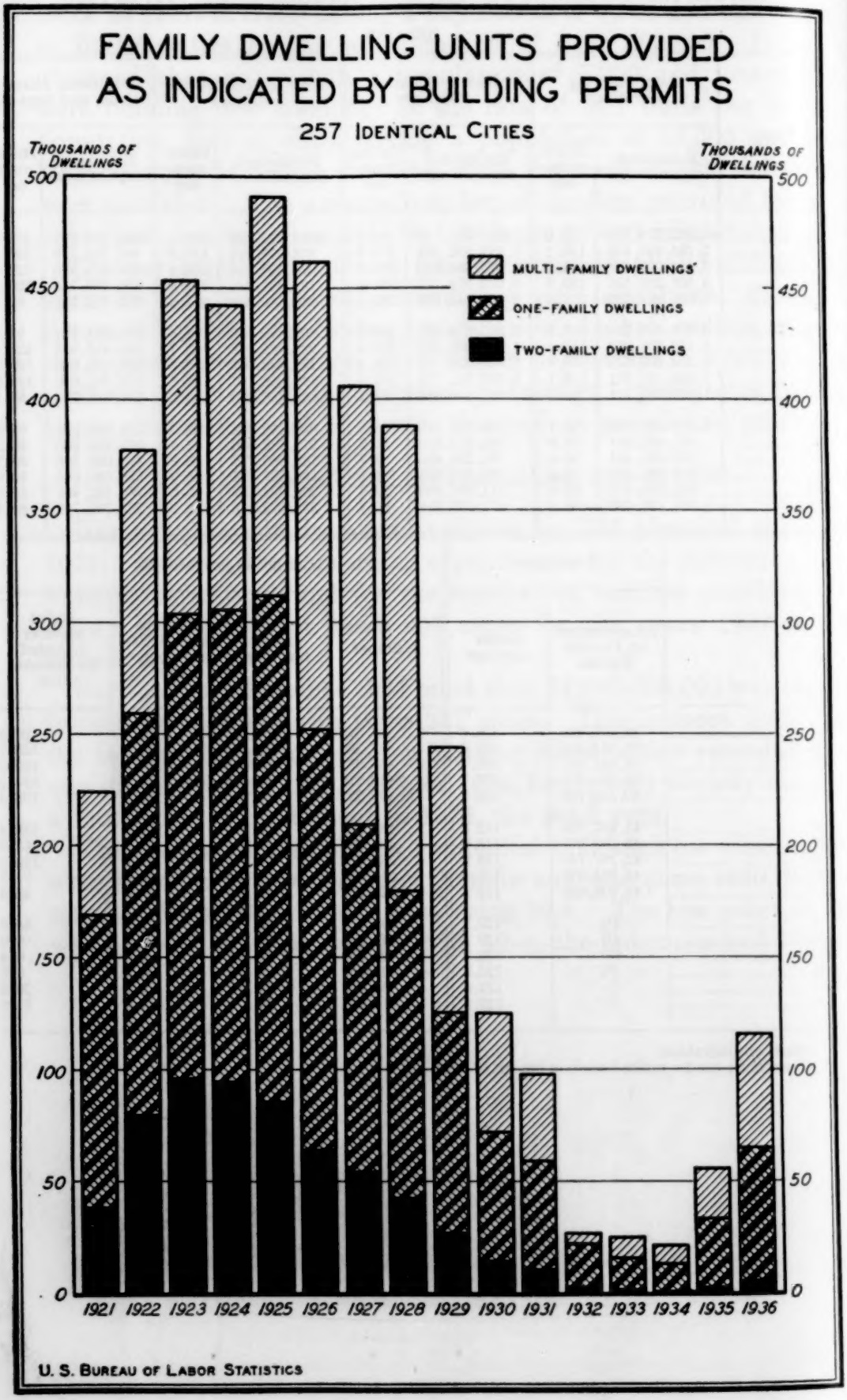
Table 8.—Estimated Expenditures for Building Construction, Families Provided for, and Index Numbers Thereof, in 257 Identical Cities, 1921 to 1936

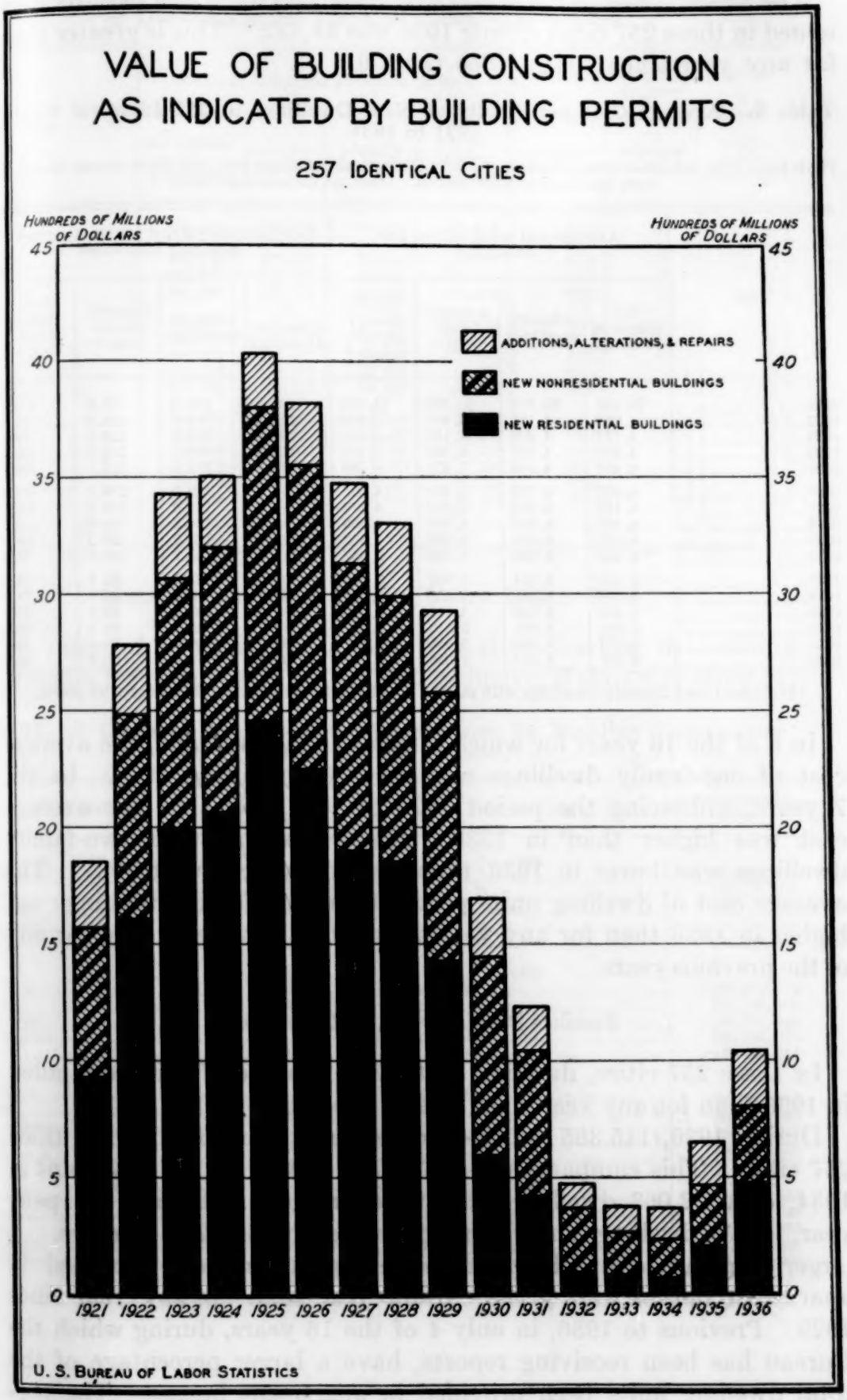
[192=100]

Year	Total building operations		New residential buildings		New nonresidential buildings		Additions, alterations, and repairs	
	Estimated expenditure	Index number	Estimated expenditure	Index number	Estimated expenditure	Index number	Estimated expenditure	Index number
1921	$1,855,779,729	100.0	$937,352,739	100.0	$635,775,199	100.0	$282,651,791	100.0
1922	2,785,940,410	150.1	1,612,352,921	172.0	876,276,713	137.8	297,310,776	105.2
1923	3,431,262,598	184.9	2,000,986,900	213.5	1,070,596,718	168.4	359,678,980	127.3
1924	3,508,266,587	189.0	2,070,276,772	220.9	1,137,631,080	178.9	300,358,735	106.3
1925	4,038,062,339	217.6	2,461,546,270	262.6	1,343,880,884	211.4	232,635,185	82.3
1926	3,826,927,204	206.2	2,255,994,627	240.7	1,300,840,876	204.6	270,091,701	95.6
1927	3,478,605,062	187.4	1,906,003,260	203.3	1,231,785,870	193.7	340,815,932	120.6
1928	3,304,699,712	178.1	1,859,429,751	198.4	1,135,549,986	178.6	309,719,975	109.6
1929	2,933,117,531	158.1	1,433,111,774	152.9	1,146,958,101	180.4	353,047,656	124.9
1930	1,699,675,514	91.6	601,269,847	64.1	849,386,873	133.6	249,018,794	88.1
1931	1,237,985,293	66.7	426,270,111	45.5	622,830,444	98.0	188,884,738	66.8
1932	481,490,267	25.9	103,452,079	11.0	275,788,958	43.4	102,249,230	36.2
1933	382,389,451	20.6	91,298,433	9.7	183,065,712	28.8	108,025,306	38.2
1934	376,686,270	20.3	76,370,924	8.1	164,627,281	25.9	135,688,065	48.0
1935	655,213,410	35.3	211,987,850	22.6	260,093,152	40.9	183,132,408	64.8
1936	1,042,123,630	56.2	472,655,094	50.4	331,672,816	52.2	237,795,719	84.1

Year	Population		Families provided for			
	As estimated by Census Bureau	Index number	Number	Index number	Ratio to each 10,000 of population	Index number adjusted to population
1921	36,575,118	100.0	224,545	100.0	61.4	100.0
1922	37,511,516	102.6	377,305	168.0	100.6	163.7
1923	38,447,913	105.1	453,673	202.0	118.0	192.2
1924	39,384,311	107.7	442,919	197.3	112.5	183.2
1925	40,320,708	110.2	491,222	218.8	121.8	198.4
1926	41,257,106	112.8	462,214	205.8	112.0	182.4
1927	42,058,897	115.0	406,095	180.9	96.6	157.3
1928	42,767,125	116.9	388,678	173.1	90.9	148.1
1929	43,665,235	119.4	244,394	108.8	56.0	91.1
1930	[1] 44,908,285	122.8	125,322	55.8	27.9	45.4
1931	([2])	122.8	98,178	43.7	21.9	35.6
1932	([2])	122.8	27,381	12.2	6.1	9.9
1933	([2])	122.8	25,879	11.5	5.8	9.4
1934	([2])	122.8	22,063	9.8	4.9	8.0
1935	([2])	122.8	55,810	24.9	12.4	20.3
1936	([2])	122.8	115,365	51.4	25.7	41.9

[1] Actual enumeration.
[2] No estimate made; ratios based on census of 1930.


FAMILY DWELLING UNITS PROVIDED AS INDICATED BY BUILDING PERMITS
257 IDENTICAL CITIES
THOUSANDS OF DWELLINGS
THOUSANDS OF DWELLINGS
500
450
400
350
300
250
200
150
100
50
0
MULTI-FAMILY DWELLINGS
ONE-FAMILY DWELLINGS
TWO-FAMILY DWELLINGS
1921 1922 1923 1924 1925 1926 1927 1928 1929 1930 1931 1932 1933 1934 1935 1936
U. S. BUREAU OF LABOR STATISTICS


VALUE OF BUILDING CONSTRUCTION
AS INDICATED BY BUILDING PERMITS
257 IDENTICAL CITIES
HUNDREDS OF MILLIONS OF DOLLARS
HUNDREDS OF MILLIONS OF DOLLARS
45
40
35
30
25
20
15
10
5
0
ADDITIONS, ALTERATIONS, & REPAIRS
NEW NONRESIDENTIAL BUILDINGS
NEW RESIDENTIAL BUILDINGS
1921 1922 1923 1924 1925 1926 1927 1928 1929 1930 1931 1932 1933 1934 1935 1936
U. S. BUREAU OF LABOR STATISTICS

The average cost of the one-family dwellings for which permits were issued in these 257 cities during 1936 was $4,432. This is greater than for any year since 1931. (See table 9.)

Table 9.—Average Cost per Family of New Dwellings in 257 Identical Cities, 1921 to 1936

[This table does not show change in cost of erecting identical buildings, but does show change in cost of such buildings as were erected. Does not include land costs]

Year	Average cost per family of new dwellings				Index numbers of cost per family of new dwellings (1921=100)			
	All classes of dwellings	1-family dwellings	2-family dwellings [1]	Multifamily dwellings [2]	All classes of dwellings	1-family dwellings	2-family dwellings [1]	Multifamily dwellings [2]
1921	$3,947	$3,972	$3,762	$4,019	100.0	100.0	100.0	100.0
1922	4,005	4,134	3,801	3,880	101.5	104.1	101.0	96.5
1923	4,127	4,203	4,159	4,001	104.6	105.8	110.6	99.6
1924	4,352	4,317	4,336	4,418	110.3	108.7	115.3	109.9
1925	4,464	4,618	4,421	4,289	113.1	116.3	117.5	106.7
1926	4,422	4,725	4,480	4,095	112.0	119.0	119.1	101.9
1927	4,449	4,830	4,368	4,170	112.7	121.6	116.1	103.8
1928	4,407	4,937	4,064	4,129	111.7	124.3	108.0	102.7
1929	4,566	4,915	4,020	4,402	115.7	123.7	106.9	109.5
1930	4,385	4,993	3,924	3,857	111.1	125.7	104.3	96.0
1931	4,225	4,834	3,607	3,644	107.0	121.7	95.9	90.7
1932	3,705	3,943	3,250	3,011	93.9	99.3	86.4	74.9
1933	3,494	3,844	3,110	3,040	88.5	96.8	82.7	75.6
1934	3,381	3,801	3,316	2,612	85.7	95.7	88.1	65.0
1935	3,759	4,228	2,955	3,201	95.2	106.4	78.5	79.6
1936	4,073	4,432	3,038	3,754	103.2	111.6	80.8	93.4

[1] Includes 1- and 2-family dwellings with stores. [2] Includes multifamily dwellings with stores.

In 8 of the 16 years for which information is available, the average cost of one-family dwellings was lower than during 1936. In the 7 years, embracing the period 1925 to 1931, inclusive, the average cost was higher than in 1936. The average cost of two-family dwellings was lower in 1936 than for any year except 1935. The average cost of dwelling units provided in multifamily dwellings was higher in 1936 than for any year since 1930, but lower than for any of the previous years.

Families Provided For, 1921 to 1936

In these 257 cities, dwelling units were provided for more families in 1936 than for any year since 1930. (See table 10.)

During 1936, 115,365 family-dwelling units were provided in these 257 cities. This compares with 55,810 in 1935. At the low point in 1934, only 22,063 dwelling units were provided. During the peak year, 1925, dwelling units were provided for 491,222 families. A larger percentage of the family-dwelling units were provided in apartment houses durirg the current year than for any year since 1929. Previous to 1936, in only 4 of the 16 years, during which the Bureau has been receiving reports, have a larger percentage of the total dwelling units been provided in apartment houses. The percentage provided in two-family dwellings fell to a new low during 1936.

Table 10.—Number and Percentage of Families Provided for in Different Kinds of Dwellings in 257 Identical Cities, 1921 to 1936

Year	Number of families provided for in—				Percentage of families provided for in—		
	All classes of dwellings	1-family dwellings	2-family dwellings [1]	Multi-family dwellings [2]	1-family dwellings	2-family dwellings [1]	Multi-family dwellings [2]
1921	224,545	130,873	38,858	54,814	58.3	17.3	24.4
1922	377,305	179,364	80,252	117,689	47.5	21.3	31.2
1923	453,673	207,632	96,344	149,697	45.8	21.2	33.0
1924	442,919	210,818	95,019	137,082	47.6	21.5	30.9
1925	491,222	226,159	86,145	178,918	46.0	17.5	36.4
1926	462,214	188,074	64,298	209,842	40.7	13.9	45.4
1927	406,095	155,512	54,320	196,263	38.3	13.4	48.3
1928	388,678	136,907	43,098	208,673	35.2	11.1	53.7
1929	244,394	98,164	27,813	118,417	40.2	11.4	48.5
1930	125,322	57,318	15,145	52,859	45.7	12.1	42.2
1931	98,178	48,330	11,310	38,538	49.2	11.5	39.3
1932	27,381	19,528	3,400	4,453	71.3	12.4	16.3
1933	25,879	14,437	2,124	9,318	55.8	8.2	36.0
1934	22,063	13,397	1,457	7,209	60.7	6.6	32.7
1935	55,810	31,030	3,023	21,757	55.6	5.4	39.0
1936	115,365	59,855	5,328	50,182	51.9	4.6	43.5

[1] Includes 1- and 2-family dwellings with stores. [2] Includes multifamily dwellings with stores.

Construction in Five Leading Cities, 1921 to 1936

THE value of expenditures in the five cities leading in building construction for each year, 1921 to 1936 inclusive, is shown in table 11.

Table 11.—5 Cities Leading in Total Expenditure for Building Construction, Each Year, 1921 to 1936

Year and city	Total expenditure	Year and city	Total expenditure
1921		*1925*	
New York	$442,285,248	New York	$1,020,604,713
Chicago	133,027,910	Chicago	373,803,571
Cleveland	86,680,023	Detroit	180,132,528
Los Angeles	82,761,386	Philadelphia	171,034,280
Detroit	58,086,053	Los Angeles	152,646,436
1922		*1926*	
New York	645,176,481	New York	1,039,670,572
Chicago	229,853,125	Chicago	376,808,480
Los Angeles	121,206,787	Detroit	183,721,443
Philadelphia	114,190,525	Philadelphia	140,093,075
Detroit	93,614,593	Los Angeles	123,006,215
1923		*1927*	
New York	789,265,335	New York	880,333,455
Chicago	334,164,404	Chicago	365,065,042
Los Angeles	200,133,181	Detroit	145,555,647
Detroit	129,719,831	Los Angeles	123,027,139
Philadelphia	128,227,405	Philadelphia	117,590,650
1924		*1928*	
New York	836,043,604	New York	916,671,855
Chicago	308,911,159	Chicago	323,509,048
Detroit	160,547,723	Detroit	129,260,285
Los Angeles	150,147,516	Philadelphia	112,225,865
Philadelphia	141,402,655	Los Angeles	101,678,768

Table 11.—5 Cities Leading in Total Expenditure for Building Construction Each Year, 1921 to 1936—Continued

Year and city	Total expenditure	Year and city	Total expenditure
1929		*1933*	
New York	$942, 297, 219	New York	$86, 560, 67
Chicago	210, 797, 640	San Francisco	58, 198, 2
Philadelphia	104, 405, 545	Los Angeles	15, 396, 2
Detroit	100, 567, 497	St. Louis	13, 067, 0
Los Angeles	93, 020, 160	Philadelphia	12, 098, 9
1930		*1934*	
New York	410, 165, 789	New York	96, 661, 7
Chicago	85, 749, 167	Washington	20, 928, 6
Los Angeles	75, 356, 715	Los Angeles	14, 968, 1
Philadelphia	53, 141, 770	Chicago	10, 176, 4
Washington	48, 823, 891	Boston	9, 381, 0
1931		*1935*	
New York	362, 864, 076	New York	153, 883, 8
Chicago	66, 693, 556	Washington	47, 121, 4
Washington	52, 588, 151	Los Angeles	32, 519, 0
Los Angeles	41, 421, 685	Detroit	22, 218, 0
Philadelphia	35, 265, 216	Chicago	17, 839, 3
1932		*1936*	
New York	78, 851, 588	New York	224, 066, 9
Washington	59, 927, 302	Los Angeles	64, 110, 3
Philadelphia	17, 862, 661	Washington	47, 771, 5
Los Angeles	17, 785, 627	Detroit	43, 212, 1
San Francisco	16, 465, 092	Chicago	35, 911, 1

Each of the five leading cities in 1936 showed gains over the previous year in the value of buildings for which permits were issued. Detroit showed a larger expenditure for building in 1936 than in any year since 1929. In New York the expenditure was higher than for any year since 1931, and in Los Angeles, higher than for any year since 1930.

Construction From Public Funds, 1935 and 1936

CONTRACTS awarded for public building construction are also included under data by cities, where data are for cities covered in the report on building permits.

During 1936 contracts were awarded or force-account work started on construction projects financed wholly or partially from Federal funds valued at nearly $1,600,000,000. This is a decrease of approximately $45,000,000 compared with 1935. (See table 12.)

Public Works Administration

Type of project	Total		The Works Program [2]		Regular governmental appropriations		Public Works Administration						
							Federal		Nonfederal				
									N. I. R. A.		E. R. A. A.		F. D. A.
	1936	1935	1936	July–Dec. 1935	1936	1935	1936	1935	1936	1935	1936	July–Dec. 1935	Nov.–Dec. 1936
	Dollars	*Dollars*	*Dollars*	*Dollars*	*Dollars*	*Dollars*	*Dollars*	*Dollars*	*Dollars*	*Dollars*	*Dollars*	*Dollars*	*Dollars*
All types	[3] 1,592,837,652	[4] 1,637,726,213	408,475,703	[5] 437,465,395	507,192,888	297,750,763	36,672,808	[5] 373,345,780	142,963,749	[5] 300,876,996	[3] 481,508,217	[4] 228,287,279	16,024,287
Building	[3] 511,629,669	[4] 442,782,127	54,016,633	[5] 40,499,986	72,318,564	43,628,421	11,539,819	59,094,157	66,229,916	[5] 148,187,761	[3] 298,263,687	[4] 151,371,802	9,261,050
Electrification	25,676,001	[5] 5,496,712	11,783,820	3,254,446	10,990,809	818,155					2,901,372	[5] 1,424,111	
Forestry	11,684,012	15,264,918	11,392,200	13,857,500	282,980	612	8,832	1,406,806					
Heavy engineering	19,357,469	2,550,068	35,000	91,777					([6])	([6])	19,251,641	2,458,291	70,828
Hydroelectric power plants	666,472	3,449,728	0	2,727,600					([7])	([7])	666,472	722,128	
Naval vessels	108,313,669	123,408,736			108,237,431	107,162,194	76,238	16,246,542					
Plant, crop, and livestock control	9,185,400	19,625,458	9,185,400	19,625,458									
Professional, technical, and clerical projects	27,884,478	[5] 16,620,896	27,884,478	[5] 16,620,896									
Public roads:													
Grade-crossing elimination	100,239,662	23,980,502	100,239,662	23,980,502									
Roads	358,028,451	[5] 289,900,223	126,501,212	57,469,525	190,636,884	93,376,369	17,146,441	132,466,268			23,202,118	[5] 6,588,061	541,796
Railroad construction and repair	5,040,450	14,671,395							5,040,450	14,671,395			
Reclamation	58,504,319	[5] 158,026,711	37,779,147	[5] 107,925,558	8,719,795	2,655,054	3,309,111	46,456,419			8,261,344	[5] 989,690	434,922
River, harbor, and flood control	115,692,173	[5] 280,697,819	13,990,613	[5] 134,381,714	99,055,903	40,820,585	103,332	104,487,582			2,542,325	1,007,938	
Street and road paving: [8]													
Grade crossing elimination	1,197,316										1,091,843		105,473
Streets and roads	40,363,212	[5] 67,155,510	3,811,624	[5] 7,806,909	4,270,488	4,721,513	2,764,935	[5] 5,966,120	6,662,800	[5] 37,314,085	20,250,069	[5] 11,346,883	2,603,296
Water and sewerage systems	155,536,460	[5] 136,242,570	958,756	756,209	1,426,456	270,048	517,985	350,631	52,174,351	[5] 83,592,987	97,638,901	[5] 51,272,695	2,820,011
Miscellaneous	43,838,439	[5] 37,852,840	10,897,158	8,467,315	11,253,578	4,297,812	1,206,115	6,871,255	12,856,232	[5] 17,110,768	7,438,445	[5] 1,105,690	186,911

[1] Subject to revision.
[2] Includes data for that part of The Works Program administered by Federal agencies.
[3] Includes $63,464,694 low-cost housing projects (housing division, P. W. A.).
[4] Includes $7,833,311 low-cost housing projects (housing division, P. W. A.).
[5] Revised.
[6] Included under "Building."
[7] Included under "Miscellaneous."
[8] Other than those for which contracts are awarded by the Bureau of Public Roads.

Decreases were shown in the value of contracts awarded for T Works Program and the Public Works Administration progra The value of awards financed from regular governmental appropr tions increased markedly, however.

Increases occurred in the value of awards for building constructi electrification projects, heavy engineering projects, grade-cross eliminations, public roads, and water and sewerage projects. I creases occurred in the value of the following types of projec Hydroelectric plants; plant, crop, and livestock-control projec railroad construction and repairs; reclamation projects; and riv harbor, and flood-control projects.

The value of contracts awarded for public building and highw construction financed wholly from State funds for the calendar ye 1935 and 1936 is given in table 13, by geographic divisions.

Table 13.—Value of Public-Building and Highway-Construction Awards Finan Wholly From State Funds, 1935 and 1936

Geographic division	Value of awards for public building			Value of awards for highway construction		
	1936	1935	Percentage change	1936	1935	Pe cent cha
All divisions	$24,489,541	$10,086,156	+142.8	$80,508,252	$52,782,494	+
New England	184,417	314,369	−41.3	5,285,559	1,800,533	+
Middle Atlantic	7,004,348	2,940,481	+138.2	11,970,227	4,793,786	+
East North Central	3,065,312	2,055,549	+49.1	8,309,782	6,536,657	+
West North Central	396,485	858,830	−53.8	4,437,606	3,915,398	+
South Atlantic	1,978,513	1,090,738	+81.4	11,710,765	4,863,446	+
East South Central	31,000	66,744	−53.6	607,455	2,002,367	−
West South Central	7,779,976	2,166,799	+259.1	7,400,166	11,175,190	−
Mountain	520,102	48,667	+968.7	7,375,830	736,671	+
Pacific	3,529,388	543,979	+548.8	23,410,862	16,958,446	+

In 1936 marked gains were shown in the value of contracts award for public buildings and road paving financed from State funds. T value of contracts for public buildings was nearly two and one-h times greater than in 1935, while awards for highway constructi advanced by more than 50 percent.

The value of contracts awarded and force-account work started f street paving financed wholly or partially from municipal funds shown in table 14 for the years 1935 and 1936, for cities having a pop lation of 150,000 or over.

Table 14.—Value of Contracts Awarded and Force-Account Work Started for Street Paving, 1935 and 1936

[Cities of the United States having a population of 150,000 or over included in survey]

Month	Number of cities reporting	Number of cities starting work	Value of contracts awarded	Value of force-account work	Total contract and force-account
1936					
January	49	10	$595,863	$94,727	$690,590
February	49	9	81,477	97,778	179,255
March	50	11	370,312	157,901	528,213
April	49	14	952,403	307,255	1,259,658
May	50	16	641,514	346,481	987,995
June	51	20	1,633,903	313,450	1,947,353
July	51	13	1,307,581	383,685	1,691,266
August	51	18	1,300,006	385,151	1,685,157
September	51	16	686,048	325,535	1,011,583
October	51	19	1,007,040	282,548	1,359,588
November	50	18	575,508	175,447	750,955
December	50	12	375,695	335,757	711,452
Total			9,597,350	3,205,715	12,803,065
1935					
January	50	6	652,651	135,068	787,719
February	51	10	117,773	97,007	214,780
March	51	11	537,617	199,589	737,206
April	51	13	1,996,260	229,878	2,226,138
May	51	15	855,515	316,353	1,171,868
June	51	17	953,175	380,445	1,333,620
July	51	20	1,427,652	669,613	2,097,265
August	51	14	583,172	238,914	822,086
September	50	14	833,908	133,925	967,833
October	46	10	967,256	311,543	1,278,799
November	45	12	470,619	109,562	580,181
December	48	11	493,079	136,508	629,587
Total			9,888,677	2,958,405	12,847,082

RETAIL PRICES

Food, Electricity, Gas, Cotton Clothing, and Tobacco

FOOD costs advanced 1.1 percent during March 1937, due in large measure to increases in prices of meats and fresh fruits and vegetables. Prices for electricity for residential customers decreased in seven cities during the first quarter of 1937. Reductions in domestic rates for gas were shown for two cities and a price advance, due to a decrease in the heating value of the gas, was reported for one city during the 3-month period. This report also shows changes in retail prices of cotton clothing and tobacco, for specified dates from March 1935 through March 1937.

Food Prices in March 1937

THE index of retail food costs advanced 1.1 percent during the 4 weeks ended March 16. The major portion of this increase was due to the continued advance in prices of fresh fruits and vegetables and to a rise in the cost of meats.

On March 16 the index for all foods was 85.4 percent of the 1923–25 average, an increase of 7.4 percent over food costs in March of a year ago. This increase was shared by each of the eight major commodity groups except eggs. Fruits and vegetables rose the most.

A comparison of food costs for March 16, 1937, with the corresponding period for earlier years shows that present costs are 42.8 percent higher than in March 1933 when the index was 59.8. On March 15, 1929, however, costs were 18.8 percent above the current level and the index stood at 101.4.

Details by Commodity Groups

THE cost of cereals and bakery products showed little change during the period between February 16 and March 16. The increase of 0.3 percent was the result of higher prices for 6 of the 13 items in the group. Price increases ranged from 0.1 percent for wheat cereal and soda crackers to 0.8 percent for rice. Lower prices were reported for three items and the prices of four items remained unchanged. The price of flour showed no change. The price of white bread rose 0.6 percent, with increases reported from 12 cities.

Meats advanced 1.1 percent, with higher prices reported for 18 of the 21 priced items. Lamb showed the greatest increase, 7.7 percent. The increase for beef was 1.1 percent and the price of pork advanced 0.8 percent. The price of roasting chickens rose 2.5 percent. Prices were lower for veal cutlets, whole ham, and red salmon.

The cost of dairy products increased 0.8 percent, due chiefly to a seasonal advance of 2.6 percent in the price of butter which was higher in 47 of the 51 cities included in the index. The price of cheese increased 0.4 percent. Fresh milk showed no price change. Cream decreased 1.3 percent and evaporated milk decreased 1.5 percent.

The decline in the cost of eggs amounted to 1.2 percent. This decrease is less than usual for this season of the year. The cost of fruits and vegetables rose 2.8 percent. The advance for the fresh items was 3.1 percent, for the canned 0.5 percent, and for the dried 2.0 percent. Prices were higher for 21 of the 29 items in the group. Apples and oranges increased in price; bananas and lemons decreased. The price of green beans rose 21.7 percent and onion prices increased 22.2 percent. Price advances for other fresh vegetables were less marked. The price of potatoes increased 0.6 percent, with divergent price movements from city to city, as is usual at this season. Carrots and spinach were the only fresh vegetables for which prices declined. The price of canned beans with pork rose 2.5 percent. Price changes for other canned items amounted to less than 1 percent. For the dried items, prices were higher, increases ranging from 0.5 percent for raisins to 3.8 percent for navy beans. Dried peaches were 0.5 percent lower.

The cost of beverages and chocolate increased 0.6 percent. Prices were higher for all items in the group. The price of coffee rose 0.8 percent. This is the continuation of a price advance which began last August. Cocoa was 1.5 percent higher and chocolate showed a gain of 1.2 percent. The recent price advances for chocolate are a reversal of the downward trend which continued throughout 1936.

Fats and oils showed an increase of 0.3 percent. The price of lard decreased 0.6 percent but prices increased for all other items in the group. Lard compound showed the greatest relative price change, an increase of 1.8 percent.

A decrease of 0.2 percent in the price of sugar resulted in a decline of 0.1 percent in the cost of sugar and sweets. Prices of the three sweets increased.

Indexes of retail food costs by major commodity groups for March and February 1937, together with corresponding indexes for March 1936, 1933, and 1929 are presented in table 1.

Table 1.—Indexes of Retail Food Costs in 51 Large Cities Combined,[1] by Commodity Groups

March and February 1937 and March 1936, 1933, and 1929

[1923-25=100]

Commodity group	1937		1936	1933	1929
	Mar. 16	Feb. 16	Mar. 10	Mar. 15	Mar. 15
All foods	85.4	84.5	79.5	59.8	101.4
Cereals and bakery products	92.9	92.6	91.7	69.3	98.2
Meats	95.4	94.3	93.3	64.2	118.6
Dairy products	83.6	83.0	79.5	59.8	105.2
Eggs	64.3	65.0	66.9	42.7	87.4
Fruits and vegetables	80.5	78.2	61.7	52.1	86.9
Fresh	80.1	77.7	60.5	51.4	84.7
Canned	82.6	82.2	78.5	65.3	97.1
Dried	76.0	74.5	57.9	47.3	101.3
Beverages and chocolate	69.3	68.9	67.6	68.5	110.9
Fats and oils	80.3	80.1	75.7	45.0	93.8
Sugar and sweets	65.6	65.6	63.7	57.4	73.5

[1] Aggregate costs of 42 foods in each city prior to Jan. 1, 1935, and of 84 foods since that date, weighted to represent total purchases, have been combined with the use of population weights.

Higher prices were reported in March for 60 of the 84 items in the indexes. The greatest relative increase was shown for the lamb items and for some of the fresh vegetables. Prices were lower for 17 items and for 7 they were unchanged. Average prices for 84 foods for 51 cities combined are shown in table 2 for March and February 1937, and for March 1936.

Table 2.—Average Retail Prices of 84 Foods in 51 Large Cities Combined[1]

March and February 1937 and March 1936

[*Indicates the 42 foods included in indexes prior to Jan. 1, 1935]

Article		1937		1936
		Mar. 16	Feb. 16	Mar. 10
Cereals and bakery products:				
Cereals:		*Cents*	*Cents*	*Cents*
*Flour, wheat	pound	5.0	5.0	4.8
*Macaroni	do	15.4	15.4	14.8
*Wheat cereal	28-oz. package	24.2	24.2	24.0
*Corn flakes	8-oz. package	8.1	8.1	8.1
*Corn meal	pound	5.4	5.4	4.9
Hominy grits	24-oz. package	9.7	9.7	9.0
*Rice	pound	8.5	8.5	8.5
*Rolled oats	do	7.5	7.5	7.4
Bakery products:				
*Bread, white	do	8.3	8.2	8.3
Bread, whole wheat	do	9.4	9.4	9.3
Bread, rye	do	9.2	9.2	9.1
Cake	do	25.4	25.3	24.4
Soda crackers	do	18.1	18.1	18.2
Meats:				
Beef:				
*Sirloin steak	do	40.1	39.7	36.3
*Round steak	do	35.9	35.4	32.9
*Rib roast	do	30.6	30.3	29.4
*Chuck roast	do	23.8	23.5	22.5
*Plate	do	15.9	15.8	15.9
Liver	do	25.4	25.4	25.4
Veal:				
Cutlets	do	40.9	42.0	40.6

[1] Prices for individual cities are combined with the use of population weights.

Table 2.—Average Retail Prices of 84 Foods in 51 Large Cities Combined—Con.

March and February 1937 and March 1936

Article		1937		1936
		Mar. 16	Feb. 16	Mar. 10
		Cents	*Cents*	*Cents*
Meats:				
Pork:				
*Chops	pound	33.1	32.2	32.1
Loin roast	do	27.0	26.3	26.8
*Bacon, sliced	do	39.9	39.8	41.2
Bacon, strip	do	34.3	34.3	35.8
*Ham, sliced	do	49.2	49.1	47.2
Ham, whole	do	29.9	30.7	30.8
Salt pork	do	25.1	25.0	24.9
Lamb:				
Breast	do	12.9	12.1	12.8
Chuck	do	22.3	20.7	21.5
*Leg	do	28.7	26.6	27.7
Rib chops	do	35.7	33.2	33.9
Poultry:				
*Roasting chickens	do	31.0	30.2	32.6
Fish:				
Salmon, pink	16-oz. can	12.8	12.8	13.1
*Salmon, red	do	24.6	24.6	25.3
Dairy products:				
*Butter	pound	41.8	40.7	40.1
*Cheese	do	29.3	29.2	27.1
Cream	½ pint	15.1	15.3	14.9
Milk, fresh (delivered and store)[1]	quart	12.3	12.3	11.6
*Milk fresh (delivered)	do	12.5	12.5	11.8
*Milk, evaporated	14½-oz. can	7.6	7.8	7.4
*Eggs	dozen	33.5	33.9	34.8
Fruits and vegetables:				
Fresh:				
Apples	pound	7.0	6.6	5.4
*Bananas	do	6.5	6.7	6.4
Lemons	dozen	30.7	33.9	28.6
*Oranges	do	36.0	35.4	30.9
Beans, green	pound	19.0	15.6	13.4
*Cabbage	do	4.0	3.8	3.8
Carrots	bunch	5.4	5.6	5.6
Celery	stalk	10.1	9.3	9.4
Lettuce	head	10.7	9.9	7.9
*Onions	pound	4.5	3.7	4.1
*Potatoes	do	3.8	3.8	2.4
Spinach	do	7.1	7.2	6.9
Sweetpotatoes	do	4.9	4.6	3.7
Canned:				
Peaches	no. 2½ can	18.9	18.8	17.9
Pears	do	22.4	22.3	22.3
Pineapple	do	22.6	22.6	22.3
Asparagus	no. 2 can	27.5	27.3	25.9
Beans, green	do	12.4	12.3	11.4
*Beans with pork	16-oz. can	7.8	7.6	7.0
*Corn	no. 2 can	13.1	13.1	11.3
*Peas	do	16.3	16.3	15.9
*Tomatoes	do	9.5	9.5	9.3
Tomato soup	10½-oz. can	8.2	8.1	8.0
Dried:				
Peaches	pound	17.5	17.6	17.0
*Prunes	do	10.7	10.6	9.7
*Raisins	15-oz. package	10.0	9.9	9.5
Black-eyed peas	pound	10.1	9.9	8.8
Lima beans	do	12.1	11.9	10.2
*Navy beans	do	10.7	10.3	5.6
Beverages and chocolate:				
*Coffee	do	25.2	25.0	24.4
*Tea	do	71.6	71.5	67.3
Cocoa	8-oz. can	10.5	10.3	10.7
Chocolate	8-oz. package	16.7	16.5	16.7
Fats and oils:				
*Lard	pound	17.5	17.6	16.2
Lard compound	do	16.5	16.2	15.0
*Vegetable shortening	do	21.9	21.8	21.6
Salad oil	pint	25.7	25.5	24.7
Mayonnaise	½ pint	17.0	16.9	17.0
*Oleomargarine	pound	19.9	19.8	18.5
Peanut butter	do	19.5	19.2	19.5
Sugar and sweets:				
*Sugar	do	5.7	5.7	5.5
Corn sirup	24-oz. can	14.5	14.4	13.6
Molasses	18-oz. can	14.5	14.4	14.3
Strawberry preserves	pound	21.7	21.3	20.3

[1] Average prices of milk delivered by dairies and sold in grocery stores, weighted according to the relative proportion distributed by each method.

Details by Regions and Cities

THE increase of 1.1 percent in the composite food-cost index was the result of widespread price increases. Costs were higher in each of the 9 geographical areas and in 46 of the 51 cities included in the index. Five of the ten additional cities from which food reports have been received also showed higher costs.

Rising prices were primarily responsible for the increase of 2.7 percent in food costs in Pittsburgh, 2.0 percent in Detroit, and 2.1 percent in Los Angeles. These advances in Pittsburgh and Detroit are accounted for by higher prices for fresh vegetables and meats. In Los Angeles, the price of white bread increased 0.5 cents a loaf.

New sales taxes, on the other hand, account for the relatively greater increases in Birmingham, Mobile, and Little Rock.

Food costs decreased in only three cities, the largest decline, 1.0 percent, occurring in Louisville. In that city the cost of both meats and fruits and vegetables declined.

Indexes of the retail costs of food, by regions and cities, are shown in table 3 for March and February 1937 and for March in earlier years.

Table 3.—Indexes of the Average Retail Cost of All Foods, by Regions and Cities [1]

March and February 1937, and March 1936, 1935, 1933, 1932, and 1929

[1923–25=100]

Region and city	1937		1936	1935	1933	1932	1929
	Mar. 16	Feb. 16	Mar. 10	Mar. 12	Mar. 15	Mar. 15	Mar. 15
Average: 51 cities combined	85.4	84.5	79.5	79.8	59.8	70.7	101.4
New England	81.9	81.6	78.4	77.9	59.8	70.7	100.7
Boston	79.3	78.8	76.6	76.6	59.1	69.1	100.1
Bridgeport	86.6	86.3	82.7	82.7	62.2	74.8	100.3
Fall River	84.6	84.4	79.5	78.1	58.4	69.8	101.2
Manchester	86.3	84.9	80.9	80.8	59.7	69.1	100.2
New Haven	87.4	87.1	82.3	80.6	61.6	75.6	102.9
Portland, Maine	83.3	82.5	79.0	77.5	60.8	72.5	101.1
Providence	82.7	82.9	78.3	77.3	59.7	69.3	100.1
Middle Atlantic	85.0	84.1	80.2	80.0	61.0	71.9	101.3
Buffalo	84.2	82.8	79.1	79.1	59.3	70.1	102.8
Newark	86.0	85.1	81.1	82.4	62.0	74.0	100.6
New York	84.3	84.1	81.1	81.0	63.0	73.5	101.1
Philadelphia	87.3	86.3	81.5	80.2	60.9	72.3	100.1
Pittsburgh	83.8	81.6	77.4	78.0	57.5	68.3	103.9
Rochester	85.8	84.9	79.1	78.2	57.5	69.2	99.5
Scranton	82.0	81.3	76.8	75.9	59.1	68.6	102.4
East North Central	86.6	85.4	80.1	80.4	58.4	70.4	103.1
Chicago	87.7	86.1	80.7	81.7	60.0	74.8	104.9
Cincinnati	89.6	89.2	82.6	83.0	59.9	71.9	105.5
Cleveland	83.9	83.1	79.4	79.0	57.3	66.8	99.7
Columbus, Ohio	87.5	86.8	80.5	82.3	57.8	71.2	100.9
Detroit	85.9	84.2	80.0	78.7	55.3	64.6	101.8
Indianapolis	87.9	86.5	78.1	77.5	57.4	68.3	104.2
Milwaukee	88.8	88.7	81.6	80.4	62.8	74.2	104.9
Peoria	88.1	87.5	80.4	80.6	58.5	69.9	102.3
Springfield, Ill	86.8	86.7	77.9	77.6	57.2	67.8	101.2

[1] Aggregate costs of 42 foods in each city prior to Jan. 1, 1935, and of 84 foods since that date, weighted to represent total purchases, have been combined for regions and for the United States with the use of population weights.

Table 3.—Indexes of the Average Retail Cost of All Foods, by Regions and Cities—Continued

March and February 1937, and March 1936, 1935, 1933, 1932, and 1929

[1923-25=100]

Region and city	1937		1936	1935	1933	1932	1929
	Mar. 16	Feb. 16	Mar. 10	Mar. 12	Mar. 15	Mar. 15	Mar. 15
West North Central	**91.9**	**90.0**	**82.3**	**82.8**	**58.9**	**70.9**	**103.4**
Kansas City	90.2	89.6	79.8	81.3	61.6	70.7	102.6
Minneapolis	95.6	94.6	85.9	84.1	57.3	72.0	104.8
Omaha	86.4	85.2	78.8	82.2	56.2	68.4	101.2
St. Louis	91.9	90.6	83.9	83.5	59.5	71.8	104.4
St. Paul	90.4	89.5	82.3	82.1	57.2	70.3	102.7
South Atlantic	**84.2**	**83.7**	**78.8**	**79.0**	**58.4**	**68.7**	**99.7**
Atlanta	82.1	81.9	75.2	76.8	54.6	65.7	102.2
Baltimore	88.0	87.4	83.0	81.9	61.4	70.2	97.9
Charleston, S. C	83.9	84.1	79.4	76.7	57.2	70.5	99.1
Jacksonville	80.4	80.2	76.5	74.2	52.9	63.8	94.2
Norfolk	85.4	85.2	79.5	78.7	57.3	72.0	104.4
Richmond	82.4	81.4	75.4	75.4	56.2	66.5	99.9
Savannah	83.6	83.4	78.6	78.0	57.7	67.3	101.2
Washington, D. C	85.0	84.3	80.8	82.8	63.1	71.7	100.8
East South Central	**82.7**	**81.5**	**73.9**	**75.9**	**55.8**	**65.7**	**100.4**
Birmingham	78.8	76.3	69.8	70.1	53.4	62.5	97.1
Louisville	91.5	92.4	82.5	86.5	60.0	70.5	107.4
Memphis	84.0	84.0	75.7	78.7	57.1	68.9	100.1
Mobile	81.3	79.5	73.9	75.8	57.4	66.7	99.4
West South Central	**83.7**	**82.9**	**77.0**	**78.6**	**58.6**	**68.4**	**101.6**
Dallas	81.8	81.0	75.7	76.9	56.7	67.1	103.7
Houston	83.4	82.7	76.1	77.1	58.1	66.1	98.4
Little Rock	85.7	83.1	76.7	77.2	54.4	63.6	102.0
New Orleans	86.3	85.7	81.0	83.5	63.0	74.7	102.9
Mountain	**91.4**	**90.8**	**82.4**	**82.8**	**60.1**	**69.8**	**98.0**
Butte	85.3	84.7	78.1	76.8	58.7	68.1	99.6
Denver	93.9	93.9	84.7	85.1	62.6	72.0	98.2
Salt Lake City	88.7	87.0	79.4	80.5	56.2	66.6	97.1
Pacific	**85.6**	**84.4**	**77.1**	**79.8**	**62.0**	**70.6**	**99.0**
Los Angeles	83.4	81.6	72.8	76.7	59.3	66.1	97.4
Portland, Oreg	88.5	87.4	79.0	77.8	60.0	69.2	98.0
San Francisco	86.4	85.4	80.6	84.0	66.3	76.0	101.8
Seattle	88.9	88.5	79.7	79.9	60.4	71.3	97.9

The Bureau collects prices in 11 cities not included in the food cost indexes. These cities are in areas not adequately represented in the indexes. Average prices for each of these cities for which the data were available have been released since June 1935.

Consumption weights have been provided for these cities, making it possible to measure changes in food costs from one period to another. Since no prices are available for the base period, 1923–25, they cannot be included in the indexes.

Percentage changes in food costs between February and March 1937 are shown in table 4 for 10 of these cities.

Table 4.—Percentage Changes in Retail Food Costs for Specified Cities, Mar. 16 Compared with Feb. 16, 1937

Region and city	Percentage change Mar. 16, 1937, compared with Feb. 16, 1937								
	All foods	Cereals and bakery products	Meats	Dairy products	Eggs	Fruits and vegetables	Beverages and chocolate	Fats and oils	Sugar and sweets
West North Central:									
Cedar Rapids	−0.2	+0.7	+1.0	−0.4	−9.0	−0.6	−0.9	+0.6	−0.9
Sioux Falls	−.1	+.4	+1.5	+.6	−3.4	−2.6	0	+.6	+.9
Wichita	+1.0	−.6	+2.1	+1.0	−7.7	+4.0	−2.1	−1.5	+.2
South Atlantic:									
Columbia, S. C	−.1	+.2	+.4	+.4	−13.9	+.9	+.9	0	−.9
Winston-Salem	+3.4	+.1	−.3	+3.4	−15.3	+12.5	+.2	+1.6	−.4
East South Central:									
Jackson	+2.8	−2.6	−.5	−1.0	−1.0	+17.2	+.8	−3.4	−.6
Knoxville	+1.3	+.2	+1.3	+.6	−.3	+3.5	+.2	−3.0	+.5
West South Central:									
El Paso	+1.2	−.7	+.2	+.1	−4.6	+6.7	−1.9	−.1	+1.7
Oklahoma City	−.9	−.3	+1.1	+.3	−20.2	+.8	−.7	−2.4	−3.9
Pacific:									
Spokane	−1.1	+.1	−1.8	+2.6	−3.0	−4.4	+.1	+.6	−1.3

Price Changes of Electricity, March 15, 1937

RESIDENTIAL rates for electricity are secured quarterly from 51 cities. These rates are used for computing average prices and typical bills in each city for the quantities of electricity which most nearly approximate the consumption requirements for the usual domestic services for a five-room house, including living room, dining room, kitchen, and two bedrooms. The blocks of consumption which have been selected as representative of average conditions throughout the country are 25 and 40 kilowatt-hours for the use of electricity for lighting and small appliances alone; 100 kilowatt-hours for lighting, small appliances, and a refrigerator; and 250 kilowatt-hours for the addition of an electric range to the preceding equipment.

The technical specifications which are used as the basis for the application of these rates are:

Floor area (1,000 square feet).

Connected load:	*Watts*
Lighting and appliances	700
Refrigeration	300
Cooking	6,000
Measured demand:	
Lighting and appliances	600
Refrigeration	100
Cooking	2,300

Outlets: Fourteen 50-watt.

Active room count: In accordance with schedule of rates.

Residential rates for electricity were reduced during the first quarter of 1937 in 7 of the 51 cities reporting to the Bureau. Customers using a relatively small amount of current derived the greatest benefit in three cities of the Middle Atlantic area and one in the West North Central area. The decrease for these four cities ranged from 4.2 to 23.1 percent for the use of 25 kilowatt-hours and from 0.7 to 14.4 percent for 250 kilowatt-hours. Changes in New York City affected customers in Bronx, Brooklyn, Manhattan, and Queens Boroughs.

Two rates are available to residential customers in Atlanta. In addition to the "Immediate" rate, there is an "Inducement" rate which provides lower prices per kilowatt-hour.[1] The "Immediate" rate now in effect was the "Inducement" rate in 1936. Reductions in "Immediate" rates are more advantageous to customers whose consumption indicates the use of large electric appliances than to those using current primarily for lighting. This is the opposite of decreases shown for "Inducement" rates, under which the small user receives the greater benefit.

The decrease in the cost of gas in Washington was advantageous only to customers using more than 50 kilowatt-hours per month. In San Francisco, where all residential customers were benefited, the price declines ranged from 7.1 percent for the use of 25 kilowatt-hours to 17.6 percent for 250 kilowatt-hours.

Net monthly bills and prices per kilowatt-hour of electricity on December 15, 1936, and March 15, 1937, and percentages of changes during the 3-month period are shown in table 5 for seven cities.

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[1] These rates are applied as follows: For each customer a "Base bill" for each month is determined by applying the "Immediate" rate to the amount of current used in the corresponding month of 1936. If the application of the "Immediate" rate to the consumption for a specified month results in a bill equal to or less than the "Base bill", the customer is billed on the "Immediate" rate. No bill greater than the "Base bill" will be rendered under this rate. If the application of the "Inducement" rate results in a bill greater than the "Base bill", the customer is billed under the "Inducement" rate. No bill less than the "Base bill" will be rendered under this rate. Whenever, in application to the month's consumption, the "Immediate" rate figures more than the "Base bill", and the "Inducement" rate figures less than the "Base bill", the customer is billed the amount of the "Base bill" for that month.

Table 5.—Changes in Retail Prices of Electricity Between Dec. 16, 1936, and Mar. 15, 1937—Monthly Bill, Price per Kilowatt-Hour, and Percentage Change

[P=Private utility]

City and date	Net monthly bill				Net monthly price per kilowatt-hour			
	25 kilowatt-hours	40 kilowatt-hours	100 kilowatt-hours	250 kilowatt-hours	25 kilowatt-hours	40 kilowatt-hours	100 kilowatt-hours	250 kilowatt-hours
	Lighting and small appliances	Lighting and small appliances	Lighting, appliances, and refrigerator	Lighting, appliances, refrigerator, and range	Lighting and small appliances	Lighting and small appliances	Lighting, appliances, and refrigerator	Lighting, appliances, refrigerator, and range
Middle Atlantic:								
Newark:					*Cents*	*Cents*	*Cents*	*Cents*
Dec. 15, 1936—P	$1.92	$2.60	$4.50	$8.75	7.7	6.5	4.5	3.5
Mar. 15, 1937—P	1.84	2.54	4.44	8.69	7.4	6.4	4.4	3.5
Percentage change [1]	−4.2	−2.3	−1.3	−0.7				
New York: [2 3]								
Dec. 15, 1936—P	1.79	2.55	4.90	8.21	7.1	6.4	4.9	3.3
Mar. 15, 1937—P	1.68	2.45	4.79	8.11	6.7	6.1	4.8	3.2
Percentage change [1]	−5.7	−4.0	−2.1	−1.2				
Scranton:								
Dec. 15, 1936—P	1.63	2.45	4.85	9.35	6.5	6.1	4.9	3.7
Mar. 15, 1937—P	1.25	2.00	4.25	8.00	5.0	5.0	4.3	3.2
Percentage change [1]	−23.1	−18.4	−12.4	−14.4				
West North Central:								
Minneapolis:								
Dec. 15, 1936—P	1.66	2.19	3.80	6.79	6.7	5.5	3.8	2.7
Mar. 15, 1937—P	1.47	1.99	3.61	6.60	5.9	5.0	3.6	2.6
Percentage change [1]	−11.5	−8.7	−5.0	−2.8				
South Atlantic:								
Atlanta:								
Immediate:								
Dec. 15, 1936—P	1.62	2.37	4.57	8.32	6.5	5.9	4.6	3.3
Mar. 15, 1937 [4]—P	1.45	2.12	3.95	6.57	5.8	5.3	3.9	2.6
Percentage change [1]	−10.8	−10.5	−13.6	−21.0				
Inducement:								
Dec. 15, 1936—P	1.45	2.12	3.95	6.57	5.8	5.3	3.9	2.6
Mar. 15, 1937—P	1.22	1.90	3.85	6.57	4.9	4.7	3.8	2.6
Percentage change [1]	−15.5	−10.6	−2.6					
Washington, D. C.:								
Dec. 15, 1936—P	.98	1.56	3.40	5.67	3.9	3.9	3.4	2.3
Mar. 15, 1937—P	.98	1.56	3.10	5.65	3.9	3.9	3.1	2.3
Percentage change [1]			−8.8	−0.3				
Pacific:								
San Francisco:								
Dec. 15, 1936—P	1.40	2.00	3.50	7.15	5.6	5.0	3.5	2.9
Mar. 15, 1937—P	1.30	1.77	3.09	5.89	5.2	4.4	3.1	2.4
Percentage change [1]	−7.1	−11.5	−11.7	−17.6				

[1] Net monthly bills are computed to mills for purposes of comparison.
[2] Prices include a 2-percent sales tax.
[3] Bronx, Brooklyn, Manhattan, and Queens Boroughs.
[4] This was the "Inducement" rate prior to January 1937.

Price Changes of Gas, March 15, 1937

RESIDENTIAL rates for gas are secured from 50 cities. These rates are used in computing average prices and typical bills for each city for quantities of gas which approximate the average residential consumption requirements for each of four combinations of

Table 6.—Changes in Retail Prices of Gas Between Dec. 16, 1936, and Mar. 15, 1937—Monthly Bill and Prices per Thousand Cubic Feet and per Therm for Specified Amounts of Gas

Table 6.—Changes in Retail Prices of Gas Between Dec. 15, 1936, and Mar. 15, 1937—Monthly Bill and Prices per Thousand Cubic Feet and per Therm for Specified Amounts of Gas

Region and city	Kind of gas [1]	Heating value per cubic foot in British thermal units	Monthly consumption in cubic feet and net monthly bill based on specified numbers of therms [2]								Monthly price based on consumption of specified numbers of therms [2]							
			10.6 therms		19.6 therms		30.6 therms		40.6 therms		Per thousand cubic feet for—				Per therm for—			
			Range		Range and manual-type water heater		Range and automatic [3] water heater		Range, automatic [3] water heater, and refrigerator		10.6 therms	19.6 therms	30.6 therms	40.6 therms	10.6 therms	19.6 therms	30.6 therms	40.6 therms
			Cubic feet	Bill	Cubic feet	Bill	Cubic feet	Bill	Cubic feet	Bill	Range	Range and manual-type water heater	Range and automatic [3] water heater	Range, automatic [3] water heater, and refrigerator	Range	Range and manual-type water heater	Range and automatic [3] water heater	Range, automatic [3] water heater, and refrigerator
West North Central:				*Dollars*		*Dollars*		*Dollars*		*Dollars*	*Dollars*	*Dollars*	*Dollars*	*Dollars*	*Cents*	*Cents*	*Cents*	*Cents*
Omaha:																		
Dec. 15, 1936	M	555	1,910	1.53	3,530	2.42	5,510	3.51	7,320	4.50	0.80	0.68	0.64	0.62	14.4	12.3	11.5	11.1
Mar. 15, 1937	M	555	1,910	1.46	3,530	2.27	5,510	3.26	7,320	4.16	.76	.64	.59	.57	13.7	11.6	10.6	10.2
Percentage change				−4.7		−6.3		−7.2		−7.6								
South Atlantic:																		
Savannah:																		
Dec. 15, 1936	M	575	1,840	2.30	3,410	4.26	5,320	6.65	7,060	8.83	1.25	1.25	1.25	1.25	21.7	21.7	21.7	21.7
Mar. 15, 1937	M	550	1,930	2.41	3,560	4.45	5,560	6.95	7,380	9.23	1.25	1.25	1.25	1.25	22.7	22.7	22.7	22.7
Percentage change				+4.9		+4.4		+4.5		+4.5								
Washington, D. C.:																		
Dec. 15, 1936	X	600	1,770	1.53	3,270	2.73	5,100	4.03	6,770	5.20	.86	.83	.79	.77	14.4	13.9	13.2	12.8
Mar. 15, 1937	X	604	1,750	1.51	3,250	2.71	5,070	4.01	6,720	5.16	.86	.83	.79	.77	14.2	13.8	13.1	12.7
Percentage change				−1.0		−0.6		−0.5		−0.7								

[1] Different kinds of gas are indicated as follows: M, manufactured; N, natural; X, mixed manufactured and natural.
[2] Typical monthly consumption for each service for a 5-room house (1 therm=100,000 B. t. u.).
[3] Automatic storage or instantaneous water heater.

services. In order to put the rate quotations upon a comparable basis it is necessary to convert the normal consumption requirements used for computing monthly bills into an equivalent heating value expressed in therms (1 therm=100,000 B. t. u.). This procedure is necessary because of the wide range in the heating value of a cubic foot of gas between different cities. The equipment and blocks of consumption which have been selected as representative of average conditions throughout the country are based upon the requirements of a five-room house, including living room, dining room, kitchen, and two bedrooms.

These specifications are:	*Therms*
Range	10.6
Range and manual-type water heater	19.6
Range and automatic-storage or instantaneous type water heater	30.6
Range, automatic-storage or instantaneous type water heater, and refrigerator	40.6

Changes in the cost of gas for domestic consumption are shown for 3 of the 50 reporting cities. Reductions shown for two cities were the result of rate decreases. For Omaha these reductions were from 4.7 percent for a consumption of 10.6 therms to 7.6 percent for 40.6 therms. In Washington the decreases varied from 0.5 to 1 percent. An advance of about 4.5 percent in Savannah was due to a decrease in the heating value of the gas supplied in that city.

A record of the net monthly bills and prices per therm and per thousand cubic feet of gas on December 15, 1936, and March 15, 1937, are shown in table 6 for each of these three cities. Percentages of change in the cost of gas during the 3-month period are also shown.

Average Retail Prices of Cotton Clothing and Tobacco Products

THE first of a series of retail prices of selected commodities not previously included in the price-reporting service of the Bureau of Labor Statistics appeared in the report on retail prices for May 1936, when prices of five tobacco products were published for periods from December 1920 through April 1936, all periods for which these prices are available in the Bureau. Prices of six items of cotton clothing for certain months from June 1927 through July 1936 were published in the August report.

In this issue prices of these articles are presented in table 7 for all price-collection periods from March 1935 through March 1937. They will be published quarterly hereafter.

Beginning with March 1935, written specifications for each article have been used in price collection in order to maintain price comparability from city to city and from period to period. Every effort is made to obtain prices of identical articles or articles of identical quality from one pricing period to another. Substitutions are sometimes necessary, but these are kept within the limits of the provisions of the specifications. The prices are representative of medium quality goods. Qualities which sell at the extreme upper and lower price ranges are excluded.

Table 7.—Average Retail Prices of Selected Articles of Cotton Clothing and of Tobacco Products in 32 Large Cities Combined

March 1935 to March 1937

Item	1935			1936					1937
	March	July	October	January	April	July	September	December	March (1)
Cotton clothing:									
Men's:									
Shirt, business, collar attached, combed yarn broadcloth	$1.78	$1.69	$1.62	$1.59	$1.59	$1.59	$1.60	$1.61	$1.64
Pajamas, combed yarn broadcloth	1.67	1.64	1.68	1.67	1.68	1.70	1.71	1.79	1.88
Overalls, 2:20 white backed denim, bib style, 43–46 yards to the dozen	1.63	1.56	1.49	1.50	1.47	1.53	1.57	1.58	1.62
Women's:									
Housedress:									
Cotton sheers	1.92	1.84	------	------	1.94	1.85	------	------	1.95
Cotton prints: 80 x 80 percale or 100 x 60 broadcloth	------	------	1.88	1.88	------	------	1.88	1.88	------
Nightgowns, nainsook, batiste, or crepe	1.12	1.12	1.11	1.10	1.09	1.08	1.08	1.09	1.12
Union suit, rib knit, combed yarn:									
Lightweight	.84	.86	------	------	.88	.86	------	------	.89
Mediumweight	------	------	.97	.98	------	------	.97	1.00	------
Tobacco products:	*Cents*	*Cents*	*Cents*	*Cents*	*Cents*	*Cents*	*Cents*	*Cents*	*Cents*
Cigarettes, medium priced..pack of 20	13.2	13.2	13.3	13.2	13.2	13.2	13.2	13.3	13.7
Cigars, inexpensive.....each	4.9	4.7	4.6	4.5	4.5	4.5	4.5	4.6	4.6
Cigarette tobacco (⅞–2-oz. pkg. priced) ounce	5.7	5.7	5.7	5.6	5.7	5.6	5.6	5.6	5.6
Pipe tobacco (1–2-oz. tin priced)..do	6.6	6.5	6.4	6.4	6.6	6.6	6.6	6.6	6.5
Plug tobacco (1–3½-oz. cut priced) ounce	6.4	6.4	6.4	6.4	6.3	6.3	6.3	6.3	6.3

[1] Preliminary.

WHOLESALE PRICES

Wholesale Prices in March 1937

THE Bureau of Labor Statistics' index of wholesale commodity prices continued to advance sharply during March. The increase of 1.7 percent brought the all-commodity index to 87.8 percent of the 1926 average, the highest level reached since May 1930. Prices have risen 7.7 percent since October 1936 and are 46.8 percent above the low of February 1933.

The advance in the all-commodity index during March was largely the result of pronounced increases in wholesale prices of farm products, metals and metal products, building materials, miscellaneous commodities, hides and leather products, and textile products, together with minor increases for foods and housefurnishing goods. Fuel and lighting materials and chemicals and drugs declined slightly.

When grouped according to stages of processing, semimanufactured commodities show the sharpest advances over a month ago and a year ago. Raw materials follow closely, due to the influence of higher prices for agricultural commodities. The rise in prices of finished, or wholly manufactured commodities, has been less pronounced, although there has been a decidedly stronger tendency since the beginning of the year.

A comparison of the March level of wholesale commodity prices with February 1937, and March 1936, is shown in table 1.

Table 1.—Comparison of Index Numbers of Wholesale Prices for March 1937 with February 1937 and March 1936

[1926=100]

Commodity groups	March 1937	February 1937	Percentage change from a month ago	March 1936	Percentage change from a year ago
All commodities	87.8	86.3	+1.7	79.6	+10.3
Farm products	94.1	91.4	+3.0	76.5	+23.0
Foods	87.5	87.0	+.6	80.1	+9.2
Hides and leather products	104.2	102.7	+1.5	94.9	+9.8
Textile products	78.3	77.5	+1.0	70.8	+10.6
Fuel and lighting materials	76.2	76.8	−.8	76.2	0
Metals and metal products	96.0	91.7	+4.7	86.6	+10.9
Building materials	95.9	93.3	+2.8	85.3	+12.4
Chemicals and drugs	87.5	87.8	−.3	79.3	+10.3
Housefurnishing goods	88.4	87.9	+.6	81.4	+8.6
Miscellaneous	79.5	77.3	+2.8	68.3	+16.4
Raw materials	90.1	88.3	+2.0	77.4	+16.4
Semimanufactured articles	89.6	85.5	+4.8	74.4	+20.4
Finished products	86.4	85.4	+1.2	81.3	+6.3
All commodities other than farm products	86.3	85.0	+1.5	80.2	+7.6
All commodities other than farm products and foods	85.5	84.1	+1.7	78.9	+8.4

Wholesale Price Level in March

THE broad advances in wholesale commodity prices which began in the fall of 1936 continued through March when the Bureau of Labor Statistics' index of wholesale commodity prices rose 1.7 percent. Eight of the 10 major commodity group classifications shared in the advance and brought the all-commodity index to 87.8 percent of the 1926 average, a 7-year peak. Compared with March of 1936, the weighted index of 784 price series showed an increase of 10.3 percent.

Increases were recorded for farm products, foods, hides and leather products, textile products, metals and metal products, building materials, housefurnishing goods, and miscellaneous commodities groups during the month. Fuel and lighting materials and chemicals and drugs declined fractionally.

Fluctuations within the commodity groups that influenced the movement of the composite index in March are shown in table 2.

Table 2.—Number of Items Changing in Price from February to March 1937

Commodity groups	Increases	Decreases	No change
All commodities	322	91	371
Farm products	39	24	4
Foods	57	27	38
Hides and leather products	25	2	14
Textile products	50	6	56
Fuel and lighting materials	6	11	7
Metals and metal products	67	0	63
Building materials	28	11	47
Chemicals and drugs	7	7	75
Housefurnishing goods	17	1	43
Miscellaneous	26	2	24

Each of the 10 groups except fuel and lighting materials is substantially above its level of a year ago. The increases range from 8.6 percent for housefurnishing goods to 23.0 percent for farm products. In March fuel and lighting materials were at the same level as a year ago.

The index for the large group "All commodities other than farm products" rose 1.5 percent from February to March and was 7.6 percent above the level recorded in March 1936. Industrial commodity prices, measured by the index for "All commodities other than farm products and foods" advanced 1.7 percent to a point 8.4 percent above a year ago.

Raw material prices rose substantially during most of March with a slightly lower tendency toward the end of the month. The index (90.1) is 2.0 percent above a month ago and 16.4 percent above a year ago. Semimanufactured commodity prices followed closely the trend in raw materials. The March index rose 4.8 percent to the highest level reached since January 1930, and was 20.4 percent above a year ago. Finished or fully manufactured commodity prices

rose steadily during the month, the index (86.4) being 1.2 percent and 6.3 percent above a month ago and a year ago respectively.

Wholesale market prices of farm products rose 3.0 percent to the highest level reached since April 1930. The advance was a result of increases of 4.3 percent in livestock and poultry, 2.6 percent in the subgroup "other farm products", and 1.5 percent in grains. Sharp increases were reported in prices of corn, cows, steers, sheep, poultry, cotton, apples, onions, and sweetpotatoes. Average prices of barley, oats, calves, oranges, dried beans, and white potatoes were lower. The current farm products index (94.1) was 3.0 percent above the February level and 23.0 percent above a year ago.

Food prices at wholesale rose 0.6 percent due principally to increases of 1.9 percent in meats, 1.7 percent in dairy products, and 1.0 percent in cereal products. Fruits and vegetables declined sharply. Pronounced increases were reported in prices of butter, hominy grits, corn meal, rice, canned spinach, cured beef, lamb, mutton, dressed poultry, canned and cured salmon, and tomato soup. Among the important food items for which lower prices were reported were powdered milk, bananas, canned peas, veal, coffee, salt mackerel, oleo oil, and granulated sugar. The food index for March (87.5) was 9.2 percent above the index for the corresponding month of last year.

The index for the hides and leather products group (104.2) rose to the highest point reached since January 1930, due to higher prices for hides, skins, leather, and shoes. Average prices of other leather products including harness, belting, gloves, and luggage remained steady.

A 2.8-percent increase in cotton goods together with small advances in clothing, knit goods, and cordage resulted in a 1.0-percent increase in the index for the textile products group. Minor decreases were shown for silk and rayon and woolen and worsted goods.

A decline in anthracite and gas along with a fractional drop in prices of petroleum products were responsible for the 0.8-percent decrease in the fuel and lighting materials group. Average prices for bituminous coal and coke were slightly higher.

The largest group increase during the month (4.7) was recorded in metals and metal products. All subgroups shared in the advance. Nonferrous metals rose 13.2 percent; iron and steel, 6.0 percent; plumbing and heating fixtures, 0.4 percent; and agricultural implements and motor vehicles, 0.1 percent.

The March building materials group index (95.9) was the highest since October 1929. Structural steel advanced 7.8 percent; lumber, 3.1 percent; brick and tile, 0.8 percent; paint and paint materials, 0.7 percent; and the subgroup of other building materials including prepared roofing rose 4.1 percent. Average prices of cement remained unchanged.

Table 3.—Index Numbers of Wholesale Prices, by Groups and Subgroups of Commodities

[1926=100]

Groups and subgroups	Mar. 1937	Feb. 1937	Mar. 1936	Mar. 1935	Mar. 1934	Mar. 1933	Mar. 1932	Mar. 1931	Mar. 1930
All commodities	87.8	86.3	79.6	79.4	73.7	60.2	66.0	76.0	90.2
Farm products	94.1	91.4	76.5	78.3	61.3	42.8	50.2	70.6	94.7
Grains	113.2	111.5	75.6	82.8	62.3	36.0	43.5	59.3	83.5
Livestock and poultry	93.7	89.9	88.3	85.8	49.5	43.0	51.4	70.7	99.6
Other farm products	88.5	86.3	69.1	72.1	67.7	45.3	52.1	74.2	95.2
Foods	87.5	87.0	80.1	81.9	67.3	54.6	62.3	77.6	94.3
Dairy products	90.2	88.7	80.3	82.9	68.9	50.9	64.2	83.5	98.3
Cereal products	90.1	89.3	85.8	92.1	85.3	62.7	68.3	74.5	84.9
Fruits and vegetables	86.5	87.8	65.1	63.2	71.6	54.3	62.3	74.3	102.3
Meats	92.0	90.3	89.7	91.6	56.5	50.5	61.4	82.0	104.2
Other foods	78.2	78.8	72.4	73.4	63.5	55.8	57.1	71.4	82.6
Hides and leather products	104.2	102.7	94.9	85.4	88.7	68.1	77.3	87.6	103.2
Shoes	102.3	101.4	100.4	97.2	98.5	83.2	88.5	94.9	103.8
Hides and skins	118.5	114.9	91.0	66.6	73.4	41.4	44.7	62.1	95.8
Leather	97.1	95.5	85.0	74.2	79.7	55.6	73.4	88.4	107.4
Other leather products	101.7	101.7	95.4	84.6	86.7	77.9	98.8	102.0	106.1
Textile products	78.3	77.5	70.8	69.4	76.5	51.3	58.0	70.0	84.8
Clothing	84.8	84.2	80.7	78.5	87.2	61.3	66.1	78.1	87.7
Cotton goods	94.0	91.3	77.1	82.4	89.1	50.0	56.2	72.4	90.3
Knit goods	64.9	64.7	62.1	62.5	65.6	47.1	54.9	63.8	83.6
Silk and rayon	33.6	33.7	30.9	27.3	29.4	25.5	33.5	45.8	73.6
Woolen and worsted goods	92.6	93.1	83.8	73.1	84.0	53.2	62.7	71.8	82.0
Other textile products	66.5	65.9	67.2	67.7	78.5	66.7	69.5	77.0	86.9
Fuel and lighting materials	76.2	76.8	76.2	73.0	71.4	62.9	67.9	68.3	79.4
Anthracite	77.8	81.6	82.5	81.1	81.2	88.3	89.9	88.4	91.2
Bituminous coal	97.5	97.4	99.4	96.3	91.1	79.3	83.5	86.0	89.9
Coke	97.7	97.6	93.7	88.8	83.4	75.2	80.4	83.7	84.2
Electricity	(1)	(1)	84.4	88.3	88.5	100.5	104.4	95.9	95.1
Gas	(1)	80.7	84.4	88.6	89.4	96.6	97.5	94.6	94.1
Petroleum products	58.6	59.1	56.0	49.8	48.7	33.1	39.8	41.8	63.7
Metals and metal products	96.0	91.7	86.6	85.7	87.1	77.2	80.8	86.4	96.6
Agricultural implements	93.1	93.1	94.2	93.6	85.2	83.1	85.0	94.3	95.5
Iron and steel	97.5	92.0	86.3	86.0	86.3	76.4	79.7	85.4	91.4
Motor vehicles	93.0	93.0	94.0	93.6	97.8	90.9	95.3	94.0	102.8
Nonferrous metals	101.1	89.4	69.9	67.1	66.3	47.9	50.5	69.3	99.6
Plumbing and heating	77.6	77.4	73.8	67.2	72.7	59.4	64.4	86.6	94.1
Building materials	95.9	93.3	85.3	84.9	86.4	70.3	73.2	82.5	93.9
Brick and tile	91.8	91.0	88.9	90.2	88.5	74.9	79.3	85.0	92.6
Cement	95.5	95.5	95.5	94.4	93.9	81.8	75.0	84.1	92.7
Lumber	102.1	99.0	82.6	79.9	86.4	57.8	61.5	74.7	91.2
Paint and paint materials	83.9	83.4	79.2	79.4	79.7	68.4	75.4	81.4	94.3
Plumbing and heating	77.6	77.4	73.8	67.2	72.7	59.4	64.4	86.6	94.1
Structural steel	112.9	104.7	92.0	92.0	86.8	81.7	79.7	84.3	91.9
Other building materials	98.9	95.0	88.5	90.1	89.9	78.4	80.6	87.6	96.7
Chemicals and drugs	87.5	87.8	79.3	81.5	75.7	71.2	75.3	82.9	91.4
Chemicals	95.3	95.6	85.9	88.1	79.0	79.3	80.9	86.4	96.5
Drugs and pharmaceuticals	83.0	83.0	73.0	73.0	71.9	54.8	59.7	64.8	68.9
Fertilizer materials	70.3	70.7	64.8	66.3	69.5	61.9	68.6	80.8	88.2
Mixed fertilizers	71.7	71.7	68.3	72.8	72.6	60.1	73.2	88.7	94.3
Housefurnishing goods	88.4	87.9	81.4	80.7	81.4	72.2	77.1	88.0	93.5
Furnishings	91.7	91.2	84.9	84.1	83.2	72.9	75.4	84.5	92.5
Furniture	85.0	84.5	77.9	77.3	79.8	71.8	79.1	91.9	94.6
Miscellaneous	79.5	77.3	68.3	69.2	69.3	58.9	64.7	72.0	80.9
Automobile tires and tubes	55.0	53.1	45.0	46.6	44.6	41.3	39.2	46.9	53.0
Cattle feed	135.0	129.4	67.9	102.2	79.6	47.3	52.4	82.1	103.8
Paper and pulp	90.2	87.5	80.3	80.6	82.7	72.2	76.8	82.6	87.7
Rubber, crude	50.9	44.3	32.9	23.5	22.8	6.3	7.2	16.0	31.6
Other miscellaneous	84.8	84.2	80.6	80.1	83.2	72.6	84.5	89.6	99.2
Raw materials	90.1	88.3	77.4	76.6	65.9	49.4	56.1	69.5	89.3
Semimanufactured articles	89.6	85.5	74.4	71.8	74.3	56.9	60.8	72.9	88.1
Finished products	86.4	85.4	81.3	81.7	77.2	65.7	71.5	79.6	90.9
All commodities other than farm products	86.3	85.0	80.2	79.5	76.2	63.8	69.3	77.2	89.2
All commodities other than farm products and foods	85.5	84.1	78.9	77.3	78.5	65.8	70.9	77.2	88.2

[1] Data not yet available.

Weakening prices for chemicals and fertilizer materials caused the chemicals and drugs group index to decline 0.3 percent. Average prices of mixed fertilizers were fractionally higher.

The index for the housefurnishing goods group rose to 88.4 percent of the 1926 average. Both furniture and furnishings shared in the advance.

Wholesale prices of crude rubber advanced 14.7 percent during March. Cattle feed increased 4.3 percent; automobiles tires and tubes 3.7 percent; paper and pulp, 3.0 percent; and other miscellaneous commodities including cooperage, caskets, matches, and cylinder oil rose 0.8 percent.

Index numbers for the groups and subgroups of commodities for March and February 1937 and for March of each of the past 7 years are shown in table 3.

Index Numbers of Wholesale Prices by Commodity Groups

INDEX numbers of wholesale prices by commodity groups, by years from 1926 to 1936, inclusive, and by months from January 1936 to March 1937, inclusive, are shown in table 4.

Table 4.—Index Numbers of Wholesale Prices, by Groups of Commodities

[1926=100]

Year and month	Farm products	Foods	Hides and leather products	Textile products	Fuel and lighting	Metals and metal products	Building materials	Chemicals and drugs	House-furnishing goods	Miscellaneous	All commodities
1926	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1927	99.4	96.7	107.7	95.6	88.3	96.3	94.7	96.8	97.5	91.0	95.4
1928	105.9	101.0	121.4	95.5	84.3	97.0	94.1	95.6	95.1	85.4	96.7
1929	104.9	99.9	109.1	90.4	83.0	100.5	95.4	94.2	94.3	82.6	95.3
1930	88.3	90.5	100.0	80.3	78.5	92.1	89.9	89.1	92.7	77.7	86.4
1931	64.8	74.6	86.1	66.3	67.5	84.5	79.2	79.3	84.9	69.8	73.0
1932	48.2	61.0	72.9	54.9	70.3	80.2	71.4	73.5	75.1	64.4	64.8
1933	51.4	60.5	80.9	64.8	66.3	79.8	77.0	72.6	75.8	62.5	65.9
1934	65.3	70.5	86.6	72.9	73.3	86.9	86.2	75.9	81.5	69.7	74.9
1935	78.8	83.7	89.6	70.9	73.5	86.4	85.3	80.5	80.6	68.3	80.0
1936	80.9	82.1	95.4	71.5	76.2	87.0	86.7	80.4	81.7	70.5	80.8
1936:											
January	78.2	83.5	97.1	71.7	75.1	86.7	85.7	80.5	81.4	67.8	80.6
February	79.5	83.2	96.1	71.0	76.1	86.7	85.5	80.1	81.5	68.1	80.6
March	76.5	80.1	94.9	70.8	76.2	86.6	85.3	79.3	81.4	68.3	79.6
April	76.9	80.2	94.6	70.2	76.4	86.6	85.7	78.5	81.5	68.6	79.7
May	75.2	78.0	94.0	69.8	76.0	86.3	85.8	77.7	81.5	69.2	78.6
June	78.1	79.9	93.8	69.7	76.1	86.2	85.8	78.0	81.4	69.7	79.2
July	81.3	81.4	93.4	70.5	76.2	86.9	86.7	79.4	81.2	71.0	80.5
August	83.8	83.1	93.6	70.9	76.3	87.1	86.9	79.8	81.4	71.5	81.6
September	84.0	83.3	94.6	70.9	76.1	86.8	87.1	81.7	81.7	71.3	81.6
October	84.0	82.6	95.6	71.6	76.8	86.9	87.3	82.2	82.0	71.5	81.5
November	85.1	83.9	97.0	73.5	76.8	87.9	87.7	82.5	82.3	73.4	82.4
December	88.5	85.5	99.7	76.3	76.5	89.6	89.5	85.3	83.2	74.5	84.2
1937:											
January	91.3	87.1	101.7	77.5	76.6	90.9	91.3	87.7	86.5	76.2	85.9
February	91.4	87.0	102.7	77.5	76.8	91.7	93.3	87.8	87.9	77.3	86.3
March	94.1	87.5	104.2	78.3	76.2	96.0	95.9	87.5	88.4	79.5	87.8

The price trend since 1926 is shown in table 5 for the following groups of commodities: Raw materials, semimanufactured articles, finished products, commodities other than farm products, and commodities other than those designated as farm products and foods. All commodities, with the exception of those included in the groups of farm products and foods, have been included in the group of "All commodities other than farm products and foods." The list of commodities included under the designations "Raw materials", "Semimanufactured articles", and "Finished products" was given in the October 1934 issue of this publication.

Table 5.—Index Numbers of Wholesale Prices, by Special Groups of Commodities

[1926=100]

Year and month	Raw materials	Semimanufactured articles	Finished products	All commodities other than farm products	All commodities other than farm products and foods	Year and month	Raw materials	Semimanufactured articles	Finished products	All commodities other than farm products	All commodities other than farm products and foods
1926	100.0	100.0	100.0	100.0	100.0	1936—Continued.					
1927	96.5	94.3	95.0	94.6	94.0	March	77.4	74.4	81.3	80.2	78.9
1928	99.1	94.5	95.9	94.8	92.9	April	77.0	74.5	81.6	80.1	78.9
1929	97.5	93.9	94.5	93.3	91.6	May	75.8	74.1	80.5	79.2	78.8
1930	84.3	81.8	88.0	85.9	85.2	June	77.6	73.9	80.7	79.4	78.8
1931	65.6	69.0	77.0	74.6	75.0	July	79.8	75.2	81.6	80.3	79.5
1932	55.1	59.3	70.3	68.3	70.2	August	81.5	75.6	82.4	80.9	79.7
1933	56.5	65.4	70.5	69.0	71.2	September	81.8	75.9	82.3	80.9	79.6
1934	68.6	72.8	78.2	76.9	78.4	October	82.1	76.2	82.0	80.9	80.1
1935	77.1	73.6	82.2	80.2	77.9	November	83.1	78.6	82.6	81.7	81.0
1936	79.9	75.9	82.0	80.7	79.6	December	85.6	82.3	83.8	83.1	82.2
1936:						1937:					
January	78.1	74.8	82.4	80.9	78.8	January	88.1	85.4	84.9	84.6	83.4
February	79.1	74.6	82.2	80.7	79.0	February	88.3	85.5	85.4	85.0	84.1
						March	90.1	89.6	86.4	86.3	85.5

Weekly Fluctuations

THE general level of wholesale commodity prices remained unchanged between the last week of February and the first week of March. During the following week, largely due to higher prices for farm products, foods, metals and metal products, and building materials, the all-commodity index advanced 1.3 percent. The upward movement slackened somewhat after midmonth and by the end of March prices moved irregularly. The cumulative advance in the composite index of 784 price series during the 4-week period February 27 to March 27 amounted to 2.0 percent. The fluctuations in the several group classifications during the month are shown by the weekly index numbers in table 6. The percentage changes from week to week in the groups are given in table 7.

Table 6.—Weekly Index Numbers of Wholesale Prices, by Commodity Groups

[1926=100]

Commodity groups	Mar. 27, 1937	Mar. 20, 1937	Mar. 13, 1937	Mar. 6, 1937	Feb. 27, 1937	Feb. 20, 1937	Feb. 13, 1937	Feb. 6, 1937
All commodities	87.8	87.6	87.2	86.1	86.1	86.0	85.6	85.4
Farm products	94.7	94.4	93.6	91.6	91.4	91.4	91.6	90.5
Foods	87.5	87.9	87.3	86.3	86.7	86.9	86.6	86.7
Hides and leather products	105.7	105.0	104.2	103.4	103.2	103.6	103.3	103.1
Textile products	78.1	77.6	77.2	76.9	76.9	77.0	76.9	77.0
Fuel and lighting materials	76.9	76.8	77.2	77.7	77.8	77.8	77.6	77.2
Metals and metal products	96.0	96.0	95.8	92.2	92.0	91.1	90.5	90.4
Building materials	96.2	96.2	95.7	94.1	93.7	92.8	92.2	92.1
Chemicals and drugs	87.0	87.3	87.3	87.1	87.5	87.7	87.0	87.2
Housefurnishing goods	90.3	89.8	89.8	89.6	89.4	89.4	87.4	87.3
Miscellaneous	79.3	78.8	77.9	77.3	77.2	77.2	75.9	75.8
Raw materials	90.0	90.3	89.7	88.2	88.1	88.1	88.2	87.4
Semimanufactured articles	90.0	90.3	89.7	86.6	86.5	85.6	84.9	84.9
Finished products	86.8	86.4	86.1	85.4	85.4	85.3	84.9	84.8
All commodities other than farm products	86.2	86.1	85.8	84.9	84.9	84.8	84.3	84.2
All commodities other than farm products and foods	85.8	85.6	85.4	84.5	84.4	84.2	83.6	83.5

Table 7.—Weekly Changes (Percent) During March 1937, by Groups of Commodities

Commodity groups	Percentage change from—				
	Feb. 27 to Mar. 27	Mar. 20 to Mar. 27	Mar. 13 to Mar. 20	Mar. 6 to Mar. 13	Feb. 27 to Mar. 6
All commodities	+2.0	+0.2	+0.5	+1.3	0
Farm products	+3.6	+.3	+.9	+2.2	+.2
Foods	+.9	−.5	+.7	+1.2	−.5
Hides and leather products	+2.4	+.7	+.8	+.8	+.2
Textile products	+1.6	+.6	+.5	+.4	0
Fuel and lighting materials	−1.2	+.1	−.5	−.6	−.1
Metals and metal products	+4.3	0	+.2	+3.9	+.2
Building materials	+2.7	0	+.5	+1.7	+.1
Chemicals and drugs	−.6	−.3	0	+.2	−.1
Housefurnishing goods	+1.0	+.6	0	+.2	+.2
Miscellaneous	+2.7	+.6	+1.2	+.8	+.1
Raw materials	+2.2	−.3	+.7	+1.7	+.1
Semimanufactured articles	+4.0	−.3	+.7	+3.6	+.1
Finished products	+1.6	+.5	+.3	+.8	0
All commodities other than farm products	+1.5	+.1	+.3	+1.1	0
All commodities other than farm products and foods	+1.7	+.2	+2.7	+1.1	+.1

Monthly Average Wholesale Prices and Index Numbers of Individual Commodities

THE table showing monthly average wholesale prices and index numbers of individual commodities formerly appearing in the Wholesale Price pamphlet is now published semiannually instead of monthly. The December 1936 issue showed the average for the year 1936 and information for the last 6 months of 1936. The monthly figures will be furnished upon request.

Wholesale Prices in the United States and in Foreign Countries

IN THE following table index numbers of wholesale prices of the Bureau of Labor Statistics of the United States Department of Labor, and those in certain foreign countries, have been brought

together in order that the trend of prices in the several countries may be compared. The base periods here shown are those appearing in the original sources from which the information has been drawn. In certain countries the base is the year 1913 or some other pre-war period. Only general comparisons can be made from these figures, since, in addition to differences in the base periods and the kind and number of articles included, there are important differences in the composition of the index numbers themselves. Indexes are shown for the years 1926–36, inclusive, and by months from January 1935 through March 1937.

Index Numbers of Wholesale Prices in the United States and in Foreign Countries

Country	United States	Argentina	Australia	Austria	Belgium	Bulgaria	Canada	Chile	China
Computing agency	Bureau of Labor Statistics	National Bank, Bureau of Economic Research	Bureau of Census and Statistics	Federal Statistical Bureau	Ministry of Labor and Social Welfare	General Statistical Bureau	Dominion Bureau of Statistics	General Statistical Bureau	National Tariff Commission, Shanghai
Base period	1926 (100)	1926 (100)	1911 (1,000)	January-June 1914 (100)	April 1914 (100)	1926 (100)	1926 (100)	1913 (100)	1926 (100)
Commodities	784	105	92	47	(Paper) 125	(Gold) 55	567 [1]	(Paper)	(Silver) 155 [2]
1926	100.0	100.0	1,832	123	744	100.0	100.0	----------	100.0
1927	95.4	98.1	1,817	133	847	102.4	97.7	----------	104.4
1928	96.7	98.5	1,792	130	843	109.8	96.4	195.5	101.7
1929	95.3	96.4	1,803	130	851	117.0	95.6	192.4	104.5
1930	86.4	92.2	1,596	117	744	94.6	86.6	166.9	114.8
1931	73.0	89.0	1,428	108	626	79.1	72.1	152.2	126.7
1932	64.8	89.5	1,411	112	532	70.3	66.7	230.4	112.4
1933	65.9	85.6	1,409	108	501	61.8	67.1	346.0	103.8
1934	74.9	98.2	1,471	110	473	63.6	71.6	343.6	97.1
1935	80.0	97.0	1,469	110	537	65.1	72.1	343.3	96.4
1936	80.8	----------	1,543	109	588	67.5	74.6	----------	108.5
1935									
January	78.8	97.7	1,459	110	472	64.5	71.4	346.7	99.4
February	79.5	96.8	1,451	109	466	64.3	71.9	340.3	99.9
March	79.4	97.1	1,443	109	464	64.2	72.0	336.7	96.4
April	80.1	96.6	1,444	109	531	66.0	72.5	334.9	95.9
May	80.2	96.5	1,458	110	552	64.7	72.3	339.3	95.0
June	79.8	96.1	1,466	111	555	64.3	71.4	339.6	92.1
July	79.4	95.6	1,479	112	553	64.2	71.4	342.4	90.5
August	80.5	95.7	1,498	111	552	64.0	71.7	343.3	91.9
September	80.7	96.6	1,495	110	560	64.4	72.4	346.2	91.1
October	80.5	98.5	1,499	109	574	66.6	73.1	348.7	94.1
November	80.6	98.5	1,479	109	582	66.9	72.7	351.5	103.3
December	80.9	98.7	1,460	109	579	66.7	72.7	350.1	103.3
1936									
January	80.6	98.9	1,475	108	581	65.8	72.9	353.7	104.3
February	80.6	97.9	1,466	107	582	65.2	72.5	355.2	105.4
March	79.6	98.2	1,485	107	578	64.7	72.4	359.5	106.4
April	79.7	98.0	1,515	108	574	66.4	72.2	359.8	107.3
May	78.6	97.8	1,521	108	569	66.3	71.8	367.8	105.8
June	79.2	97.6	1,523	109	570	66.0	72.3	374.4	106.1
July	80.5	98.8	1,552	110	576	66.6	74.4	382.2	107.2
August	81.6	100.5	1,585	109	582	67.7	76.2	389.8	107.4
September	81.6	100.3	1,573	110	594	68.8	76.4	----------	107.0
October	81.5	99.9	1,591	111	602	70.4	77.1	----------	109.7
November	82.4	----------	1,620	111	615	71.2	77.2	----------	113.0
December	84.2	----------	1,611	111	637	71.5	79.7	----------	118.8
1937									
January	85.9	----------	----------	112	658	----------	81.3	----------	121.6
February	86.3	----------	----------	112	----------	----------	82.9	----------	122.9
March	87.8	----------	----------	112	----------	----------	----------	----------	123.0

[1] Revised for commodities since January 1934.

[2] Quotations, 154 since January 1932.

Index Numbers of Wholesale Prices in the United States and in Foreign Countries—Continued

Country	Czechoslovakia	Denmark	Finland	France	Germany	India	Italy	Japan	Netherlands
Computing agency	Central Bureau of Statistics	Statistical Department	Central Bureau of Statistics	General Statistical Bureau	Federal Statistical Bureau	Department, etc.,[3] Calcutta	Central Institute of Statistics	Bank of Japan, Tokio	Central Bureau of Statistics
Base period	July 1914(100)	1931 (100)	1926 (100)	1913 (100)	1913 (100)	July 1914(100)	1928 (100)	October 1900(100)	1926-30 (100)
Commodities	69	161	120	(Paper) 126	400	72	293	56	269 (plus)
1926	943	143	100	695	134.4	148	.....	236.7	105.8
1927	968	134	101	642	137.6	148	.....	224.6	102.8
1928	968	134	102	645	140.0	145	.....	226.1	102.2
1929	914	132	98	627	137.2	141	95.4	219.8	99.7
1930	811	114	90	554	124.6	116	85.4	181.0	89.6
1931	738	100	84	502	110.9	96	74.5	153.0	76.3
1932	682	103	90	427	96.5	91	69.6	161.1	64.6
1933	659	110	89	398	93.3	87	63.4	179.5	62.9
1934	674	119	90	376	98.4	89	62.0	177.6	63.0
1935	704	122	90	338	101.8	91	68.2	185.5	61.5
1936	704	129	92	.....	104.1	91	76.4	197.5	63.8
1935									
January	694	122	90	350	101.1	94	.....	181.5	61.7
February	698	122	90	342	100.9	90	.....	184.1	61.6
March	700	119	90	335	100.7	87	.....	183.5	60.6
April	697	120	90	336	100.8	88	.....	182.3	60.9
May	703	120	90	340	100.8	91	.....	182.4	60.9
June	707	120	90	330	101.2	91	.....	180.2	60.9
July	722	120	90	322	101.8	91	.....	180.2	60.6
August	705	123	90	330	102.4	89	.....	182.9	60.8
September	705	124	91	332	102.3	89	.....	188.9	61.8
October	703	126	92	342	102.8	93	.....	194.0	63.3
November	708	126	91	348	103.1	92	.....	193.6	62.7
December	707	126	91	354	103.4	93	.....	191.9	62.5
1936									
January	711	126	90	359	103.6	92	74.3	191.8	62.4
February	704	126	91	372	103.6	91	74.5	191.0	62.0
March	706	126	91	376	103.6	91	75.4	190.7	61.5
April	703	126	90	371	103.7	92	75.9	192.4	61.1
May	703	126	90	374	103.8	90	75.6	192.4	61.0
June	698	125	90	378	104.0	90	75.8	193.6	61.6
July	699	127	91	391	104.2	91	74.7	197.4	62.3
August	691	129	91	403	104.6	90	75.9	200.7	62.7
September	693	130	92	420	104.4	91	76.9	201.0	62.6
October	704	133	93	471	104.3	93	77.1	200.4	68.2
November	714	134	94	.....	104.4	93	77.8	203.5	69.5
December	722	136	95	.....	105.0	94	79.0	214.9	71.0
1937									
January	737	137	98	.....	105.3	98	79.1	233.3	73.0
February	745	140	.....	.....	105.5	99	80.9	230.4	.....
March	754	.....	.....	.....	.....	.....	.....	.....	.....

[3] Department of Commercial Intelligence and Statistics.

Index Numbers of Wholesale Prices in the United States and in Foreign Countries—Continued

Country	New Zealand (revised)	Norway	Peru	Poland	South Africa	Sweden	Switzerland	United Kingdom	Yugoslavia
Computing agency	Census and Statistics Office	Central Bureau of Statistics	Central Bank of Reserve	Central Office of Statistics	Office of Census and Statistics	Board of Trade	Federal Labor Department	Board of Trade	National Bank
Base period	1909–13 (1,000)	1913 (100)	1913 (100)	1928 (100)	1910 (1,000)	1913 (100)	July 1914 (100)	1930 (100)	1926 (100)
Commodities	180	95	(Paper) 58	238	188	160	77	[1] 200	55
1926	1,553	----	203.2	----	1,387	149	144.5	----	100.0
1927	1,478	----	202.6	----	1,395	146	142.2	----	103.4
1928	1,492	157	191.9	100.0	1,354	148	144.6	----	106.2
1929	1,488	149	185.7	96.3	1,305	140	141.2	----	100.6
1930	1,449	137	178.0	85.5	1,155	122	126.5	100.0	86.6
1931	1,346	122	175.1	74.6	1,119	111	109.7	87.8	72.9
1932	1,297	122	170.3	65.5	1,032	109	96.0	85.6	65.2
1933	1,308	122	180.2	59.1	1,047	107	91.0	85.7	64.4
1934	1,330	124	188.1	55.8	1,143	114	89.8	88.1	63.2
1935	1,385	127	188.8	53.1	1,066	116	89.8	88.9	65.9
1936	1,399	134	191.9	54.0	1,109	120	95.6	94.4	68.4
1935									
January	1,345	125	186.3	52.7	1,074	115	88.3	88.3	64.5
February	1,361	125	188.2	52.2	----	115	87.6	88.0	63.9
March	1,365	126	191.2	52.1	----	115	86.4	86.9	63.0
April	1,367	125	190.6	52.2	1,044	115	87.1	87.5	62.9
May	1,365	125	190.4	52.7	----	115	87.6	88.3	64.0
June	1,374	126	191.5	52.5	----	116	88.6	88.5	63.9
July	1,386	127	190.7	52.8	1,069	116	89.9	88.1	63.3
August	1,393	128	188.6	53.5	----	115	91.3	88.5	64.8
September	1,419	128	186.7	54.1	----	115	92.2	89.6	67.8
October	1,434	130	188.0	54.4	1,080	117	93.3	91.2	70.0
November	1,419	130	188.1	54.4	----	118	92.8	91.3	71.2
December	1,414	131	189.3	52.7	----	118	92.1	91.5	71.6
1936									
January	1,405	131	191.1	52.1	1,120	118	91.0	91.8	71.1
February	1,384	132	191.9	52.2	----	118	91.0	91.7	70.0
March	1,386	132	191.2	52.1	----	118	90.9	91.7	70.0
April	1,393	132	192.5	53.0	1,122	118	91.9	91.9	69.1
May	1,391	132	192.1	53.7	----	118	92.0	91.9	67.0
June	1,399	132	191.3	53.9	----	118	91.9	92.6	65.4
July	1,395	132	192.5	53.6	1,085	119	93.1	93.6	65.6
August	1,409	134	192.7	53.9	----	120	93.4	95.2	66.0
September	1,421	136	192.2	54.6	----	122	96.8	96.1	67.0
October	1,426	136	192.0	55.5	1,111	123	103.1	97.6	68.9
November	1,427	137	191.7	56.1	----	124	105.2	98.3	69.8
December	1,450	140	191.6	56.9	----	126	106.8	100.8	71.2
1937									
January	----	144	----	58.4	1,131	129	108.4	102.9	70.4
February	----	147	----	59.9	----	132	111.4	103.9	70.9
March	----	----	----	----	----	----	----	----	----

[1] Revised for commodities since January 1930.

RECENT PUBLICATIONS OF LABOR INTEREST

APRIL 1937

Child Labor

Child labor facts, 1937. New York, National Child Labor Committee, 419 Fourth Avenue, [1936]. 31 pp., charts, illus. (Publication No. 369.)

Deals with extent of child labor, child-labor legislation, fields of child labor, and industrial accidents to minors, with references to pertinent literature.

Civilian Conservation Corps

The Civilian Conservation Corps: Some aspects of its social program for unemployed youth. By Henry Coe Lanpher. (In Social Service Review, Chicago, December 1936, pp. 623–636.)

This new America—the spirit of the Civilian Conservation Corps. Edited by A. C. Oliver, Jr., and Harold M. Dudley. New York, Longmans, Green & Co., 1937. 188 pp.

A collection of letters from C. C. C. enrollees and other documents revealing the character-building forces and accomplishments of the organization. Statistical data on the conservation work done by the campers, expenditures, etc., are also included in the volume.

Coal Industry

Major economic tendencies in the bituminous-coal industry. By Theodore A. Veenstra and Wilbert G. Fritz. (In Quarterly Journal of Economics, Cambridge, Mass., November 1936, pp. 106–130.)

Points to overcapacity as an underlying cause of the coal industry's ills, and to the place of mechanization in promoting the interest of the operators, temporarily at least, at the expense of the miners. Special consideration is given to labor problems.

Productivity in the Belgian coal-mining industry. By Margaret H. Schoenfeld. Washington, U. S. Bureau of Labor Statistics, 1937. 18 pp. (Serial No. R. 506, reprint from March 1937 Monthly Labor Review.)

Consumer Problems

The economics of consumption. By Charles S. Wyand. New York, Macmillan Co., 1937. 565 pp.

An attempt to promote efficiency in the exercise of the consumer function. The consumer, in a price economy, is defined as "any person whose productivity, as measured by his current income, is less than current expenditures for the satisfaction of his personal wants." As thus defined, the consumer group includes, it is estimated, about three-fifths of the population. It is held that under the existing centralized control of income and other prevailing conditions, consumers as defined by the author should shift much of their effort from production to the more effective use of their existing wealth and income. There are discussions of consumer choice, levels of living, standards of living, norms of living, and consumer goals. The author proposes a Department of the Consumer in the Federal Government.

Technology and the American consumer: A brief discussion of the relation of machinery to consumer purchasing power as reflected in wages of factory workers and prices of manufactured goods. Chicago, Machinery and Allied Products Institute, 221 North La Salle Street, 1937. 26 pp., charts.

Cooperative Movement

Consumers' cooperatives. Compiled by Julia E. Johnsen and others. New York, H. W. Wilson Co., 1936. 297 pp. (The Reference Shelf, Vol. 11, No. 2.)
Intended for debating purposes, this book contains arguments for and against the proposition "that the extension of consumers' cooperatives would contribute to the public welfare", drawn from current literature on and studies of the cooperative movement.

Cooperatives. By Ryllis Alexander Goslin. New York, Foreign Policy Association, Inc., 8 West 40th Street, 1937. 46 pp., charts. (Headline Books, No. 8.)
A general, summary account, in popular style, of consumers' cooperation—types, accomplishments, etc., in various countries. Contains many pictorial charts.

Periodicals issued by farmers' marketing and purchasing associations. By Chastina Gardner. Washington, U. S. Farm Credit Administration, Cooperative Division, March 1937. 17 pp., mimeographed. (Miscellaneous Report No. 5—revised.)

Statystyka spółdzielni związkowych, 1928–1933. Warsaw, Główny Urząd Statystyczny, 1936. 91 pp.
Report of Polish National Council of Cooperatives, covering various types of societies affiliated with the central auditing unions, for the years 1928 to 1933. In Polish, with résumé and table of contents in French.

Cost of Living

Consumer use of selected goods and services, by income classes. By Ada Lillian Bush. Washington, U. S. Bureau of Foreign and Domestic Commerce, 1937. 155 pp. (Market Research Series, No. 5–10.)
The localities covered are Portland, Oreg.; Casper, Wyo.; Oklahoma City, Okla.; Paducah, Ky.; Frederick, Md.; Des Moines, Iowa; Lansing, Mich.; Erie, Pa.; Burlington, Vt.

Methods of measuring variations in family expenditures. By Faith M. Williams. (In Journal of American Statistical Association, Washington, D. C., March 1937, pp. 40–49; also reprinted.)

Quantity and cost budgets for (1) family of an executive, (2) family of a clerk, (3) family of a wage earner, (4) dependent families or children; prices for San Francisco, October 1936. Berkeley, University of California, Heller Committee for Research in Social Economics, 1937. 80 pp., mimeographed.

Economic and Social Problems

Getting and earning—a study of inequality. By Raymond T. Bye and Ralph H. Blodgett. New York, F. S. Crofts & Co., 1937. 274 pp.
An effort to help in solving "the age-long problem of inequality." The most important innovation proposed is the gradual abolition of land rents. One chapter discusses wages.

Labor's search for more. By Malcolm Keir. New York, Ronald Press Co., 1937. 527 pp.
Presented by the author as "the recent record of the struggles of ordinary persons to improve their lot", this study reviews the outstanding events in the economic history of the 20th century in the United States. The review includes brief accounts of the labor, radical, and farmer movements during that period, and of the principal strikes; anti-union activities of organized employers; and the effects of labor legislation, court decisions, collective bargaining, and political action, on the struggle for "more." Selected references include most of the standard works in this field.

Work less or earn more? New York, You and Industry Library, 11 West 42d Street, 1936. 18 pp., charts. (You and Industry Series, Booklet No. 7.)

The American standard of living. New York, You and Industry Library, 11 West 42d Street, 1936. 22 pp., charts. (You and Industry Series, Booklet No. 4.)

Personality in the depression: A study in the measurement of attitudes. By Edward A. Rundquist and Raymond F. Sletto. Minneapolis, University of Minnesota Press, 1936. 398 pp., charts. (University of Minnesota, Institute of Child Welfare, Monograph Series No. XII.)

Attempts to ascertain the effects of unemployment upon personality and family relationships. Employed and unemployed groups were compared as to their discontent with the economic order, their general adjustment to conditions, their morale, their family attitudes, etc.

Big business, its growth and its place. Edited by Alfred L. Bernheim and others. New York, Twentieth Century Fund, Inc., Corporation Survey Committee, 330 West 42d Street, 1937. 102 pp., charts.

The authors conclude that more than half of the country's corporate assets are held by only 1/10 of 1 percent of the corporations, but that more than two-fifths of the country's total economic activity as measured by income produced is unincorporated. They state, however, that the sphere of influence of corporations goes indirectly beyond incorporated companies, because of concentration and control by interlocking directorates, investment trusts, trade associations, etc. Size as measured by volume of employment is described in terms of the extent of concentration of employment in large establishments in the principal industries.

A simple theory of capital, wages and profit or loss: A new and social approach to the problem of economic distribution. By Elizabeth C. van Dorp. London, P. S. King & Son, Ltd., 1937. 260 pp.

Explorations in economics—notes and essays contributed in honor of F. W. Taussig. New York, McGraw-Hill Book Co., Inc., 1936. 539 pp., charts.

Part II, under the head "Wages and Capital", contains essays on various aspects of labor problems and labor economics.

A selected bibliography of the literature on economic fluctuations, 1930–36. By R. A. Gordon. Cambridge, Mass., Harvard University Press, 1937. 32 pp. (Review of Economic Statistics, Vol. 19, No. 1, Part 2.)

England since the industrial revolution, 1815–1935. By J. Hampden Jackson. London, Victor Gollancz, Ltd., 1936. 312 pp., maps, diagrams.

A text book which emphasizes the economic aspect of English history from the battle of Waterloo to the present. One chapter dealing with the working-class movement outlines the cooperative, trade union, and socialist movements in the period 1880 to 1913. The earlier humanitarian and chartist movements, and the first trade unions, are discussed briefly in other chapters.

Surplus labor and the social wage in Great Britain. By Witt Bowden. (In American Economic Review, Evanston, Ill., March 1937, pp. 31–44.)

A study of the economic basis of the social wage, which is defined as income indirectly obtained by workers from public services, municipal investment, and cooperation.

Education and Guidance

The California guidance conference. By George A. Rice. (In Occupations, The Vocational Guidance Magazine, New York, 551 Fifth Avenue, March 1937, pp. 493–507.)

The three principal subjects of discussion at this meeting were programs of guidance in local, State, and Federal agencies, in industries, and in schools; significant research in the field of guidance; and occupational trends.

Vocational service for juniors: Three-year report, 1934–1935–1936. New York, Vocational Service for Juniors, 122 East 25th Street, 1937. 16 pp.

The activities of this philanthropic organization include junior placement, a junior consultation service, psychological testing and research, and an employment and training information service.

Vocational guidance throughout the world—a comparative survey. By Franklin J. Keller and Morris S. Viteles. New York, W. W. Norton & Co., Inc., 1937. 575 pp., charts, illus.

An account of what is being done in various countries to aid people in their quest for occupations which will enable them to fit into the present complex machine world, and how vocational guidance and applied psychology are being used in this connection. Descriptions of procedures and achievements are presented against a background of shifting national ambitions and attainments.

A Borstal experiment in vocational guidance. By Alec Rodger. London, Industrial Health Research Board, 1937. 41 pp., diagrams. (Report No. 78.)

Notwithstanding the fact that the tests used in this experiment with a group of delinquent boys gave good results, the author holds that tests cannot be considered as supplying a whole and adequate basis for vocational guidance.

Annual directory and program of agricultural education [in Illinois], 1936–1937. Springfield, Illinois Board for Vocational Education, 1936. 50 pp., illus. (Bulletin No. 66.)

According to a general survey of Illinois high schools, between 700 and 800 of them have a heavy percentage of farm boys among the students. In 1936–37 two hundred and eighty-eight of these schools offered courses in vocational agriculture.

Books, pamphlets, and other materials recommended for teachers of workers' education. Washington, U. S. Works Progress Administration, Office of Specialist in Workers' Education, June 1936. 58 pp., mimeographed. (Revised ed.)

Employment and Unemployment

The realities of unemployment. By Harry L. Hopkins. Washington, U. S. Works Progress Administration, [1937?]. 18 pp., charts.

Discusses the need of an unemployment census, the outlook as to unemployment in the future, causes of continuing unemployment, what the Government can do, Government maintenance of labor reserve, relation of Works Progress Administration to the unemployed including the unemployable, need for continuing work relief, and cooperation of Government and business.

Industrial classification of unemployed and gainfully employed workers [in Michigan]. Lansing, State Emergency Welfare Relief Commission, 1936. 26 pp., charts. (Michigan Census of Population and Unemployment, Employment and Unemployment Statistics [preliminary], 1st Series, No. 3.)

Data on unemployment in selected industries in 1935, taken from this report, are given in this issue of the Monthly Labor Review.

Arbejdsløsheden i aarene, 1931–35. Copenhagen, Statistiske Departement, 1937. 149 pp. (Statistiske Meddelelser, 4.række, 100.bind, 2.hæfte.)

A report on unemployment in Denmark, the statistics being presented by industry and occupation.

Employment trends in Lucas County, Ohio, 1925–1934. Toledo, Ohio, University of Toledo, Bureau of Business Research, 1936. 8 pp., mimeographed. (Bulletin No. 2.)

Building Industries National Council yearbook for 1936. London, 5 Duke Street, Adelphi, W. C. 2, 1936. 116 pp.

Statistics of employment in building construction and allied industries in Great Britain, 1932–35, taken from this yearbook, are presented in this issue of the Monthly Labor Review.

Employment Offices

Growth and work of State employment services, 1933 to December 1936. By G. L. Webber. Washington, U. S. Bureau of Labor Statistics, 1937. 7 pp. (Serial No. R. 512, reprint from February 1937 Monthly Labor Review.)

Proceedings of the twenty-fourth annual convention of the International Association of Public Employment Services, United States and Canada, Indianapolis, Indiana, May 27–29, 1936. Washington, U. S. Division of Labor Standards, 1936. 124 pp. (Bulletin No. 8.)

Farm Tenancy

Farm tenancy. Hearing before the Committee on Agriculture, House of Representatives, 75th Congress, 1st session, on H. R. 8, a bill to establish the Farmers' Home Corporation and to encourage and promote the ownership of farm homes and to make the possession of such homes more secure * * *, January and February 1937 (also testimony given in 74th Congress, April 16, 1935). Washington, 1937. 362 pp. (Serial A.)

Report of the President's Committee on Farm Tenancy—findings and recommendations. Washington, [National Resources Committee?], 1937. Various paging; mimeographed.

Reviewed in this issue of the Monthly Labor Review.

Housing

Current developments in housing. Edited by David T. Rowlands and Coleman Woodbury. Philadelphia, American Academy of Political and Social Science, 1937. 285 pp., charts. (The Annals, Vol. 190, March 1937.)
A collection of articles on different phases of the housing question.

Government opportunities and responsibilities in a national home building program. New York, Committee for Economic and Social Progress, 730 Fifth Avenue, 1937. 40 pp.
In this report the Committee for Economic and Social Progress points out the deterrents to a successful home-building program, for which it considers business, finance, labor, and the Government are responsible, and makes suggestions for a coordinated housing program on the part of the Government. The committee also states that housing should be furnished for the most needy rather than for the middle group.

Homes for workers. Washington, Federal Emergency Administration of Public Works, Housing Division, 1937. 87 pp., illus.; bibliography. (Bulletin No. 3.)
Simplified discussion of housing needs and the part that workers can play in obtaining better dwellings.

Housing management—principles and practices. By Beatrice Greenfield Rosahn and Abraham Goldfeld. New York, Covici Friede, 1937. 414 pp.
This study of housing management is divided into four parts, dealing respectively with administration, building maintenance, community activities, and the actual practice followed in nine housing projects. The volume includes an extensive bibliography of general references on housing and slum clearance.

Methods of housing finance in the United States and abroad. Compiled by Virginia Turrell. Washington, U. S. Central Housing Committee, August 1, 1936. 5 pp., mimeographed. (Selected References on Housing, No. 1.)

State housing legislation at the end of 1936. By Margaret H. Schoenfeld. Washington, U. S. Bureau of Labor Statistics, 1937. 12 pp. (Serial No. R. 517, reprint from February 1937 Monthly Labor Review.)

The failure of housing regulation. New York, New York City Housing Authority, 10 East 40th Street, 1936. 19 pp., illus.
Traces legislation in New York City designed to regulate housing, and comments on the existing housing problems.

Working-class housing on the continent and the application of continental ideas to the housing problem in the county of London. London, County Council, Housing and Public Health Committee, 1936. 30 pp., plans, illus.

Rent rebates. By Geoffrey Wilson. London, New Fabian Research Bureau, 37 Great James St., W. C. 1, 1936. 51 pp. (Publication 28.)
An exposition of the theory of rent rebates and the method of application in different parts of England.

Rural housing. London, Central Housing Advisory Committee, 1936. 19 pp., illus.
Shows the progress made in improving rural housing in England, and outlines publicity arrangements designed to interest owners in taking advantage of the facilities provided by special legislation.

Housing and town planning in Iceland. By Gudmundur Hannesson. (In International Federation for Housing and Town Planning Bulletin No. 37, London, W. C. 1, March 1937, pp. 5–27; charts, illus.)
Statistics of the number of houses are shown, by kind of construction and location. Attention is also given to cost of building and rents, and provisions for State assistance in building and in town planning. Résumés in French and German are provided.

Ruch budowlany w miastach, 1932–1934. Warsaw, Poland, Główny Urząd Statystyczny, 1936. 43 pp.
A report on dwelling construction in the cities of Poland. Printed in Polish with résumé in French and French translations of the table of contents and table heads.

Immigration

Aliens and alien-baiters. By Louis Adamic. (In Harpers' Magazine, New York, November 1936, pp. 1–16.)

In this article the author reviews certain attitudes, which he considers dangerous to the country, toward aliens within our borders.

Industrial Accidents and Workmen's Compensation

Twentieth annual report of the United States Employees' Compensation Commission, July 1, 1935, to June 30, 1936. Washington, 1936. 77 pp.

Contains information and statistics on operations under the United States Employees' Compensation Act, the United States Longshoremen's Act, the District of Columbia Compensation Act, and the Federal act of February 15, 1934, as applied to the Civil Works Administration, the Civilian Conservation Corps, relief employees, and the Florida hurricane victims. During 1935 the Commission received reports of 33,139 new injuries, excluding those within the scope of the act of February 15, 1934. This was 3 percent below the all-time high record of 1934.

Fiftieth annual report of the Interstate Commerce Commission, November 1, 1936. Washington, 1936. 170 pp.

Surveys the year's activities of the Commission and its various bureaus, including the new Bureau of Motor Carriers. The number of persons killed on steam railways in connection with the operation of trains increased from 4,652 in 1934 to 4,889 in 1935 and the number injured increased from 16,446 to 16,591. The accident death rate for passengers on trains was 0.97 per billion passenger-miles in 1935 compared with 1.49 in 1934. Casualties to trespassers and persons at grade crossings in 1935 accounted for 89.4 percent of the total accident fatalities reported.

Fourteenth report of the Industrial Commission of Colorado, for the biennium December 1, 1934, to November 30, 1936. Denver, 1936. 117 pp., charts, folders.

Reviews the work of the Industrial Commission in connection with workmen's compensation, industrial relations, factory and boiler inspection, wage claims, minimum wage, unemployment compensation, and employment service. The number of accidents reported increased from 25,127 in 1935 to 29,647 in 1936, and the compensation and medical benefits increased from $716,591.18 to $787,016.58 in the same period. The report includes 82 State Supreme Court decisions affecting labor which were handed down since the last biennial report was published.

Thirteenth report of Connecticut Board of Compensation Commissioners, covering period November 1, 1934, to November 1, 1936. Hartford, 1936. 16 pp. (Public Document No. 58.)

During the 2-year period covered by this report, 38,348 accidents were reported for a coverage of 508,000 to 513,000 employees, and awards totaling $5,719,541.97 were paid. There were 184 compensable deaths, as compared with 153 during the preceding 2-year period. The report discusses certain medical problems and the matter of occupational diseases, and recommends some changes in the State compensation law.

Annual report of the Commission of Labor and Industry (Workmen's Compensation Department) of the State of Kansas, for the fiscal year ending June 30, 1936. Topeka, 1936. 45 pp., charts.

A total of 7,597 accidents were reported for the fiscal year 1936 as compared with 6,423 for 1935. The compensation paid on cases closed amounted to $539,316.79 in the fiscal year 1936, and $514,396.45 during the previous year.

Seventh biennial bulletin of Minnesota Compensation Insurance Board, covering period ending December 31, 1936. St. Paul, 1937. 24 pp.

Summarizes the activities of the Board in the control and supervision of rate making and the procedure for the underwriting of workmen's-compensation insurance. Rate reductions were made possible in 1935 and 1936 due to improved economic and industrial conditions.

Ninth annual report of the Missouri Workmen's Compensation Commission, for the statistical year of 1935 and operating year of 1936. Jefferson City, 1937. 18 pp.

The year 1935 brought 58,129 reports of accidents, an increase of 5,732 over the previous year. Of this total, 43,484 were noncompensable cases, 14,130 compensable, and 515 not under the law. Total compensation and medical aid amounted to $2,217,486, an increase of $240,811 over 1934. The report gives data on costs, by type of disability and by sex, for accident and occupational-disease cases in 1935; on revised costs, by type of disability, for all accidents reported for the years 1927 to 1934; and a summary of the total compensation and medical aid paid during the period 1927 to 1935.

Työssä sattuneet tapaturmat vuonna 1933. Helsinki, Sosialiministeriö, 1936. 61 pp.

Annual report on industrial accidents in Finland during 1933, covering distribution by industries of the number of insured workers, including government employees; total pay roll, insurance premiums, compensation payments, and number of accidents by extent of disability, duration of disability, age of worker, nature of injury, and cause of injury. Printed in Finnish and Swedish, with general remarks, nomenclature, and table of contents in French.

Industrial Homework

Lavoro a domicilio e assicurazioni sociali in Germania. By Lutz Richter [University of Leipzig]. (In Le Assicurazioni Sociali, Istituto Nazionale Fascista della Previdenza Sociale, Rome, Italy, November December 1936, pp. 735–745.)

Deals with home work and social insurance for home workers in Germany during the present regime. The article has also been reprinted in the German language.

Industrial Hygiene

Seventh annual yearbook, American Public Health Association, 1936–1937. New York, American Public Health Association, 50 W. 50th Street, 1937. 204 pp. (Supplement to American Journal of Public Health, March 1937.)

Committee reports are included on subjects such as food and nutrition, compensation for occupational diseases, and air-analysis procedures.

Condensed list of sources of information on air conditioning. Washington, U. S. Bureau of Foreign and Domestic Commerce, Electrical Division, February 15, 1937. 25 pp.

Report on the prevention of blindness, by standing committee on prevention of blindness of Union of Counties Associations for the Blind. London, 66 Victoria Street, S. W. 1, 1936. 150 pp., diagrams, folder.

Discusses the causes of blindness and their relative prevalence. A chapter on occupational blindness lists the processes mainly responsible for eye accidents and suggests preventive measures.

Fatigue and boredom in repetitive work. By S. Wyatt and J. N. Langdon. London, Industrial Health Research Board, 1937. 77 pp., diagrams. (Report No. 77.)

Measurement of the responses of female operatives on simple repetitive work. The authors conclude that the more intelligent the worker and the more superior she feels to her job the greater the element of boredom. The results of efforts to provide diversion, as for example the introduction of music, are also measured.

Industrial Relations

Collective bargaining in the soft-coal industry. By Buel W. Patch. Washington, Editorial Research Reports, 1013 Thirteenth Street NW., 1937. 17 pp. (Vol. 1, 1937, No. 10.)

Collective agreements in the petroleum industry. Washington, U. S. Bureau of Labor Statistics, 1937. 7 pp. (Serial No. R. 521, reprint from February 1937 Monthly Labor Review.)

Continuous discharge book, American seamen. Hearing, January 12, 1937, before the Committee on Commerce, United States Senate, 75th Congress, 1st session, on presentation of demands of striking "rank and file" seamen relative to continuous discharge book. Washington, 1937. 57 pp.

Governmental protection of labor's right to organize. Summary of evidence introduced at a hearing before the National Labor Relations Board bearing upon the factual basis of the National Labor Relations Act and the reasonableness of the regulations embodied therein. Washington, National Labor Relations Board, 1936. 174 pp. (Bulletin No. 1.)

Methods used in strike statistics. By Florence Peterson. (In Journal of American Statistical Association, Washington, D. C., March 1937, pp. 90–96; also reprinted.)

International Labor Relations

The International Labor Organization faces the problem of economic planning. (Annals of Collective Economy, Geneva, Switzerland, 8 Rue Saint-Victor, October–December 1936, pp. 307–402.)

Contains the final statements of Albert Thomas, the first director of the International Labor Office, relating to economic planning, and a recent analysis of the problems of planning by the present director.

Maritime labor treaties of 1936. By Carter Goodrich. Washington, U. S. Bureau of Labor Statistics, 1937. 7 pp. (Serial No. R. 516, reprint from February 1937 Monthly Labor Review.)

Labor Legislation

Democracy and the Supreme Court. By Robert K. Carr. Norman, University of Oklahoma Press, 1936. 142 pp.

Examines the functions of the Supreme Court in special reference to such legislation as that relative to minimum wage, hours of labor, child labor, etc. Reaches the conclusion that "we should place the final power to determine the legislative policies of our American Government in the highest democratic tribunal in the land, Congress, itself."

Labor Organizations and Congresses

Industrial unionism and the A. F. of L. By Buel W. Patch. Washington, Editorial Research Reports, 1013 Thirteenth Street NW., 1936. 17 pp. (Vol. 2, 1936, No. 17.)

Report on trade union organization. London, General Federation of Trade Unions, 1937. 16 pp.

A discussion of trade-union philosophy and objectives, with particular emphasis upon the effects on trade-union development of governmental "control of functions formerly undertaken by trade unions," such as unemployment and sick benefits. One section of the report gives brief sketches of the inception and date of founding of several of the oldest existing British unions.

Protokoll förda vid Landsorganisationens i Sverige, elfte ordinarie kongress i Stockholm den 27 september–4 oktober 1936. Stockholm, Landsorganisationen i Sverige, 1936. xvi, 613 pp.

Minutes and procedings of the congress of the Swedish Federation of Labor Unions held in Stockholm September 27 to October 4, 1936. Of the 384 delegates to the congress, 250 represented 41 national unions with a total membership of 719,044—612,693 men and 106,351 women.

Old-Age Care and Insurance

Old age security in the Social Security Act. By Edwin E. Witte. (In Journal of Political Economy, Chicago, February 1937, pp. 1–44.)

Answers by the executive director of the former Committee on Economic Security, to many of the criticisms of the provision made for the dependent aged under the Federal Social Security Act.

Report of Delaware Old Age Welfare Commission for the year 1936. Wilmington, 1937. 8 pp.

Report on old-age pensions paid in Delaware in 1936.

Thirty-first annual report of the Carnegie Foundation for the Advancement of Teaching. New York, 522 Fifth Avenue, 1936. 193 pp., charts.

The teachers' pension system originally created under an endowment by the Carnegie Foundation in 1905, was organized on a stock-company basis as the Teachers Insurance and Annuity Association in 1918, and the original plan to provide free pensions to college teachers was changed to a life-insurance and annuity plan. The above report states that the association is now paying currently over $500,000 annually in retirement benefits, and has already paid over $1,400,000 in benefits under life-insurance policies. Besides a short history of the development of the association, the report contains statistics of operation and benefits paid since the inception of the system.

The passage of the British old-age pension act of 1908. By Benjamin Sacks. (In Southwestern Social Science Quarterly, Norman, Okla., March 1937, pp. 331–341.)

Summarizes the arguments for and against the various provisions of the British old-age pension act—arguments familiar to Americans in connection with discussion of the Federal Social Security Act.

Suggested standards for homes for the aged. New York, Welfare Council of New York City, 44 East 23d Street, 1937. 18 pp., mimeographed. (4th edition, revised.)

Personnel Management

Personnel policies and working conditions in the manufacture of cigarettes and tobacco. Washington, U. S. Bureau of Labor Statistics, 1937. 22 pp. (Serial No. R. 514, reprint from February 1937 Monthly Labor Review.)

Personnel practices governing factory and office administration. New York, National Industrial Conference Board, Inc., 247 Park Avenue, 1937. 134 pp. (Study No. 233.)

Handbook of company practices concerning hours of work and attendance; employment and pay-roll procedures; absences from work; plant privileges for wage earners; office rules and regulations; discharge and resignation.

Less than 25 percent of the establishments reported having fixed a definite maximum hiring age. Wherever restrictions of this kind exist the maximum is ordinarily lower for women than for men.

Compensating industrial effort: A scientific study of work and wages. By Z. Clark Dickinson. New York, Ronald Press Co., 1937. 479 pp., charts.

A study of the incentives for work and of modes of stimulating, measuring, and rewarding individual productivity. The book is written primarily from the point of view of labor management.

A list of references on the civil service and personnel administration in the United States—Federal, State, and local. Compiled by Ann Duncan Brown. Washington, U. S. Library of Congress, Division of Bibliography, 1936. 91 pp., mimeographed.

Prison Labor

Federal-State regulation of Commerce: The significance of the prison-made goods decision of the U. S. Supreme Court. Washington, American Retail Federation, 1627 K Street NW., 1937. 7 pp., mimeographed.

Gives the main points of the decision and the background of the case, and considers the possible effects of the precedent set by the enactment of legislation prohibiting the shipment of prison-made goods into States having laws against sale and possession of such goods.

The future of prison industry. By Bryant Putney. Washington, Editorial Research Reports, 1013 Thirteenth Street NW., 1937. 14 pp. (Vol. 1, 1937, No. 4.)

A discussion of the extent of productive work in prisons and the probable effects of efforts to restrict markets for goods manufactured by prison labor.

The prison labor problem in Texas. Washington, U. S. Prison Industries Reorganization Administration, 1937. 115 pp., mimeographed.

Describes the existing prison set-up in Texas and the changes needed. It shows the kinds of work being done by prisoners and the amount of each type of employment furnished. An appendix lists the estimated amounts of materials now being bought for State use, as a guide to the future work possibilities for prisoners. While all inmates of prisons were being employed at the time of the study, it is stated they were not working to full capacity and more jobs could be undertaken if the industries were to be reorganized.

Productivity and Technological Changes

Statistical problems confronted in the analysis of the relationship between production, productivity, and employment. By David Weintraub. Philadelphia, U. S. Works Progress Administration, National Research Project on Reemployment Opportunities and Recent Changes in Industrial Techniques, 12 S. 12th Street, 1937. 20 pp., charts.

Unemployment and increasing productivity. By David Weintraub and Harold L. Posner. Philadelphia, U. S. Works Progress Administration, National Research Project on Reemployment Opportunities and Recent Changes in Industrial Techniques, 12 S. 12th Street, 1937. 75 pp., charts.

Includes estimates of changes in national income, in the available supply of labor, in the amount of labor employed, and in the productivity of labor from 1920 to 1935. There is also an estimate of changes in the proportion of workers in the service industries.

Men and machines. New York, You and Industry Library, 11 West 42d Street, 1936. 20 pp., charts. (You and Industry Series, Booklet No. 2.)

A popular treatment of the effects upon employment, occupations, wages, and prices, of the introduction and development of labor-saving machines.

Recreation

Second annual report of the Rhode Island State Planning Board, for the year 1936, containing a report on recreation in Rhode Island. Providence, 1937. 51 pp., maps.

A few pages of the publication are devoted to the activities of the State Planning Board and the remainder to the report on recreation areas and facilities of the State.

Rapport fait au nom de la commission des finances chargée d'examiner le projet de loi portant fixation du budget général de l'exercice 1937 (education physique—sports et loisirs). By Georges Barthélemy. Paris, Chambre des Députés, 1936. 136 pp.

Reviews what is being done and what is needed in France in the field of physical education, sports, and leisure. Summaries of activities in other countries are also included.

Relief Measures and Statistics

Survey of cases certified for Works Program employment in 13 cities. By Susan M. Shepherd and Gertrude Bancroft. Washington, U. S. Works Progress Administration, Division of Social Research, 1937. 46 pp. (Research Bulletin, Series IV, No. 2.)

Gives data on number of cases certified as eligible for Works Program employment, on April 15, 1936, their employment and relief status, their past employment experience on the Works Program, and the degree of utilization in such employment of skills belonging to the workers' usual occupations. Information is also included relative to the number of families that are represented in private employment and the total March 1936 incomes of certified cases, by size of households.

Workers on relief in the United States in March 1935: A census of usual occupations. Washington, U. S. Works Progress Administration, Division of Social Research, 1937. 133 pp.

This enumeration covered persons from 16 to 64 years of age, inclusive, employed or looking for work, who were members of households to which relief was awarded under the general relief program jointly undertaken by the States and the Federal Emergency Relief Administration.

They shall not want. By Maxine Davis. New York, Macmillan Co., 1937. 418 pp.

Reviews the growth of the unemployment-relief system in the United States since 1932, and describes the systems in Chicago, in England, and in Sweden. Reaches the conclusion that we should have no more "social work" but an integrated system of dealing with unemployment (insurance, relief works, heavy public works, and a dole), "with employment exchanges as the core of the whole plan"—all of this to be set up under civil service.

Welfare activities of Federal, State, and local governments in California, 1850–1934. By Frances Cahn and Valeska Bary. Berkeley, University of California, Bureau of Public Administration, 1936. xxiv, 422 pp.

This history of welfare activities in California traces the development of certain phases of public-welfare work in that State and shows the changes which resulted in the assumption by governmental agencies of responsibility for welfare work. Separate chapters deal, respectively, with dependent and neglected children; handicapped children; dependent and handicapped adults; the unemployed; workers in industry; and specialized groups (veterans, Indians, and immigrants).

Financial statement of the Colorado State Department of Public Welfare, April 1 to December 31, 1936. Denver, 1937. 16 pp.

Relief, old-age assistance, and aid to dependent children and to the blind in Colorado in 1936 are among the matters covered.

Report of the Connecticut Department of Public Welfare, 1935, and the Public Welfare Council, 1936. Hartford, 1936. 198 pp. (Public Document No. 28.)

Contains reports on provision for the deaf, aged, and poor. The section on care of the aged includes a description of each of the private homes for aged in the State, also general data on public almshouses.

Public assistance in Utah: Statistics for December 1936 and a summary for the year. Salt Lake City, State Department of Public Welfare, 1937. 29 pp., map, charts; mimeographed.

Includes data on assistance to the aged and to the blind.

Social work year book, 1937: A description of organized activities in social work and related fields. New York, Russell Sage Foundation, 1937. 709 pp.

The topical articles published in Part I, with two exceptions, are restricted to the treatment of social work and allied activities in the United States. The references following the various articles constitute as a whole an extensive and up-to-date social-work bibliography. Part II is a directory of National and State agencies in the fields covered by this volume.

Social Security (General)

Financing the Social Security Act. By Eleanor L. Dulles. Washington, U. S. Social Security Board, Bureau of Research and Statistics, 1937. 116 pp., charts.

Some statistics of expenditures under the Social Security Act in 1936, taken from this publication, are given in this issue of the Monthly Labor Review.

The leading ideas of social insurance. By Konstanty Krzeczkowski. Warsaw, Poland, Institute for Social Problems, 1936. 210 pp.; bibliography. (Actuarial Series, No. 9.)

Deals with theories of social insurance, going back to the 17th century. Printed in Polish with a summary in English.

Textile Industry

Textiles as a world problem. By Smith Simpson. 14 pp. (In American Federationist, Washington, D. C., March 1937, pp. 256–269; also reprinted.)

Considers labor and related conditions in the textile industry of the United States and foreign countries with special reference to issues confronting the world conference in Washington, D. C., in April 1937, called by the International Labor Office to consider labor and general economic conditions in that industry and their effects upon international competition.

Unemployment Insurance

Analysis of State unemployment compensation laws, January 1, 1937. Washington, U. S. Social Security Board, 1937. In tabular form.

Report on unemployment compensation [*New Jersey*]. Trenton, Social Security Commission, 1936. 122 pp., chart. (Publication No. 4.)

Contains a draft bill for unemployment compensation, and a majority statement in support of it. A minority report and bill favoring an employer-reserve plan are also included.

[*Economic brief for appellees, submitted to United States Supreme Court, October term, 1936, by John J. Bennett, Jr., Attorney General, State of New York, in support of constitutionality of New York unemployment-insurance law.*] Albany, Office of Attorney General, [1936?]. 224 pp., charts.

The material is presented under four main heads: The extent and burden of unemployment; Interdependence and instability of industry the source of unemployment; Unemployment insurance as a means of meeting the unemployment risk; Reasonableness of the pay-roll tax. Appendixes include statements of American business men in favor of unemployment insurance, information on operation of the British unemployment-insurance system, and a selected bibliography of references on unemployment insurance, unemployment, and related subjects.

Wages and Hours of Labor

Wages, hours, and working conditions in the bread-baking industry, 1934. Washington, U. S. Bureau of Labor Statistics, 1937. 143 pp., charts, illus. (Bulletin No. 623.)

Wages, hours, and working conditions in the folding-paper-box industry, 1933, 1934, and 1935. Washington, U. S. Bureau of Labor Statistics, 1937. 81 pp., charts, illus. (Bulletin No. 620.)

Wage and salary payments and average wages in Lucas County, Ohio, 1925–1934. Toledo, Ohio, University of Toledo, Bureau of Business Research, 1936. 8 pp., mimeographed. (Bulletin No. 3.)

United States–Philippine trade, with special reference to the Philippine Independence Act and other recent legislation. Washington, U. S. Tariff Commission, 1937. 215 pp., charts. (Report No. 118, Second Series.)

Data on wages and employment in the Philippines, taken from this report, are published in this issue of the Monthly Labor Review.

Prices and wages at Paris under John Law's system. By Earl J. Hamilton. (In Quarterly Journal of Economics, Cambridge, Mass., November 1936, pp. 42–70; charts.)

The first of a series of statistical studies of prices, money wages, and real wages, in France, during the inflationary period of the early eighteenth century. For this early period, an unusual body of statistical data has been discovered.

Youth Problems

Unemployed youth of New York City. By Ellen Nathalie Matthews. Washington, U. S. Bureau of Labor Statistics, 1937. 18 pp. (Serial No. R. 511, reprint from February 1937 Monthly Labor Review.)

Youth plans a new world; being the official record of the first World Youth Congress, Geneva, August 31 to September 6, 1936. Geneva, Switzerland, International Federation of League of Nations Societies, [1936?]. 208 pp.

The fundamental themes of the congress were: Nations and the League of Nations; the economic and social organization of the world; and the moral, religious, philosophical, and other bases of peace.

General Reports

Trend of manufactures in New York State from 1919 to 1933. Albany, Department of Labor, 1936. 127 pp., charts. (Special Bulletin No. 189.)

Shows for each industry group covered the number of wage earners, value added by manufacture per wage earner, labor's share in the value added by manufacture, and other information regarding the manufacturing industry in the State, based on the biennial censuses of manufactures taken by the U. S. Bureau of the Census.

Annuaire statistique du royaume de Bulgarie. Sofia, Direction Générale de la Statistique, 1936. 620 pp. (In Bulgarian and French.)

Contains statistics of wages, industrial accidents, industrial disputes, compulsory labor service, social insurance, prices, consumption, housing, and cooperative associations, in 1934 or 1935 and earlier years.

Annual report on the social and economic progress of the people of Ceylon, 1935. London, [Colonial Office], 1937. 149 pp., map, charts, illus. (Colonial Reports, Annual, No. 1797.)

One chapter deals with wages and cost of living and another with housing conditions.

The new social order in China. By T'ang Leang-Li. Shanghai, China United Press, 299 Szechuen Road, 1936. 282 pp. ("China To-day" Series.)

The story of the political and social evolution of China, containing discussions of child labor, cooperative societies, labor legislation, the labor movement, standard of living of the industrial worker, wages, and other subjects of labor interest. Printed in English.

Ammattientarkastus vuonna 1935. Helsinki, Sosialiministeriö, 1936. 79 pp., illus.

Annual report on labor inspection in Finland during 1935, containing data on protective legislation, working hours, labor of women and minors, and industrial accidents and compensation therefor. There are French translations of the table of contents and texts of statistical tables, and a résumé in French.

Statistical abstract for British India with statistics, where available, relating to certain Indian States, from 1924–25 to 1933–34. Delhi, Department of Commercial Intelligence and Statistics, 1936. 969 pp.

The subjects reported on include cooperative societies, emigration, prices, factory employment, and trade unions.

Annual report on the social and economic progress of the people of Jamaica, 1935. London, [Colonial Office], 1937. 50 pp. (Colonial Reports, Annual, No. 1796.)

Housing is discussed briefly and some figures are given on cost of living and on wages paid to employees of the government railway (the only one in Jamaica) and to skilled and unskilled workers in government and in private employment.

The statistical abstract of the Ministry of Agriculture and Forestry, Japan, 1935–36. Tokyo, 1936. xix, 217 pp., map. (In English and French.)

The volume includes statistics of cooperative societies, 1925–1935; and of wages in farming, sericulture, and raw-silk production, 1924–1935. Some of the data on wages are given in this issue of the Monthly Labor Review.

The annual statistical report of the Tokyo Chamber of Commerce and Industry, 1936. Tokyo, 1936. 312 pp. (In Japanese and English.)

Wages and hours of labor, prices, unemployment, production, number of factories and factory employees, and cooperative societies are among the subjects covered. Index numbers of prices and the data on wages are brought down to 1936, but the figures on the other subjects mentioned are for 1935 or earlier years.

The New Zealand official year book, 1937. Wellington, Census and Statistics Department, 1936. 894 pp., map.

Sections are devoted to wages and hours of labor, employment and unemployment, trade unions, industrial disputes, industrial accidents, pensions, prices, and labor laws and allied legislation.

Norges industri: Produksjonsstatistikk 1935 og opgaver over industribedrifter under loven om ulykkestrygd for industriarbeidere m. v. 1934. Oslo, Statistiske Centralbyrå, 1937. 81 pp.

Contains statistics of industrial production in Norway in 1935 and earlier years, hours of work from 1922 to 1934, and accident insurance in 1934.

Annual report on mines, Province of Nova Scotia, 1936. Halifax, Department of Public Works and Mines, 1937. 293 pp., illus.

Gives data on fatal accidents and on production of coal mines, metalliferous mines, and quarries. There is also a directory of coal mines and companies.

Report on economic and commercial conditions in Paraguay, November 1936. By R. H. Tottenham-Smith. London, Department of Overseas Trade, 1937. 47 pp.

Labor conditions and legislation and the cost of living are briefly discussed.

Brief description and sources of important index-numbers relating to the United Kingdom and certain other countries, with special reference to those quoted in the bulletins and supplements of the London and Cambridge Economic Service. London, London and Cambridge Economic Service, 1936. 20 pp. (Special Memorandum No. 44.)

Papers and proceedings of the forty-ninth annual meeting of the American Economic Association, Chicago, Ill., December 1936. Evanston, Ill., American Economic Association, 1937. 333 pp. (Supplement to American Economic Review, March 1937.)

Housing, unemployment insurance, and opportunities for employment in professional positions in the Federal Government service were discussed in papers presented at the meeting.

Public affairs pamphlets: An index to inexpensive pamphlets on social, economic, political, and international affairs. Washington, U. S. Office of Education, 1937. 83 pp. (Bulletin, 1937, No. 3.)

The general subjects include child labor, youth problems, recreation, consumers' cooperatives, social-security plans, unemployment, and labor problems, the latter covering a wide range of topics.

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